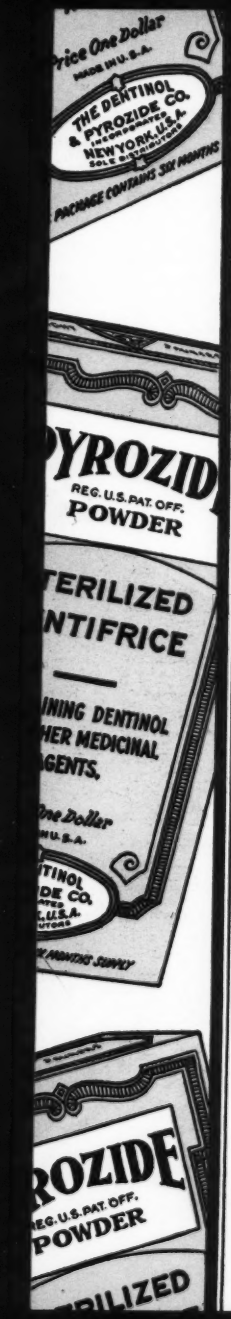
ORAL HYGIENE

February
1932

Circulation this issue 72,028



Dental Observation in Reference to

GUM-GRIPPED TEETH

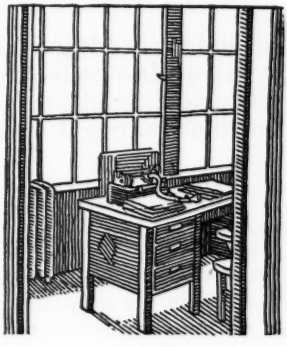
The old saying that "A chain is only as strong as its weakest link" very amply applies to the teeth and gums of the mouth. A tooth is only as strong as the surrounding gingival tissue because if it is not firmly gripped by the gums it will soon become lost, due to the ravages of infection and occlusal stress.

Knowing the importance of keeping the gums firm and healthy we have continued to suggest the use of PYROZIDE POWDER for the home use of the patient and DENTINOL for the use of the dentist at the chair. The fact that our product has been successful in aiding unhealthy mouth conditions, has been proven time and time again by dentists and patients everywhere.

Prescribe PYROZIDE POWDER and use DENTINOL for the treatment of sore, spongy, bleeding gums and you will find that it will be a very beneficial aid in keeping the mouths of your patients in a clean, healthy condition.

The Dentinol & Pyrozide Co.
Incorporated
SOLE DISTRIBUTORS
1480 Broadway New York, N. Y.

THE *Publisher's*



No. 127

CORNER

By MASS

IN December the CORNER was written by Dr. Frank Dunn of Cleveland, and in January the copy, by Dr. Alec Richardson, came from Sydney, Australia. It seems a pious idea to grab the wheel again before some less kindly guest-conductor reveals all.

The wheel-grabbing is literal. It was so hastily done a minute ago that the little hard rubber spool at the right end of the typewriter carriage was pulled off. It's just empty air over there now when you reach out to twist the missing spool so as to turn the carriage up a line.

Of course there is another rubber spool at the left, and a nickel-plated handle too, which really makes it unnecessary to use either spool, but an old right-hand spool addict can't learn new tricks.

A typewriter is a perverse mechanism at that. For years I have been trying to thread new ribbons into mine, at the usual intervals, without ever being able to remember whether the ribbon-reels turn right or left on their spindles, so that, as a rule, when the thing

is all threaded up and my hands look like a minstrel's, the two spindles pull against each other, like a couple of pups with a rag, and the ribbon gets taut and more than likely splits, thus putting Literature flat on its back.

One night recently the carriage stuck, and it wouldn't let go even when banged heartily with a heavy pair of scissors. So mechanical papa gets busy and unscrews some clamps and takes it off. The instant it was lifted from its moorings some sort of a tension cord let go with a terrifying zizz and then a handful of little steel balls started rolling out of a hole somewhere and dropping on the desk and then on the floor with defiant tings—each ting a minor doom-clap. When this catastrophic cadence had subsided there was nothing to do but go groveling for the steel balls whilst feverishly hoping to find the hole from which they had drooled.

The search ended with the discovery of an inviting hole into which to stuff them; somehow the tension cord was retrieved from the tangle of type-bars and springs in the recesses of the machine, after a good deal of muttering, and considerable poking with a little hook made of a paper-clip. Then, the cord in place again and the carriage screwed back on its bed, a deep sigh of relief sounded like a trumpet of triumph.

Away we go!—until a frightful grinding crunch suggested that all was not well with our little world. When a thing like that happens you can scarcely bear to look.

But the true spirit of mechanical genius cannot be downed. So off the carriage comes once more and zizz! like an angry rattler goes the tension cord again as it snaps into the gizzard of the machine. But the dear little lousy hellish spheroids don't roll out this time for they have crunched themselves into a ghastly metallic mush.

At this point, perfect self-control won't let you do

more than utter a sad "Tsk, tsk" as you pour what remains of your typewriter into a pillow-slip so as to be sure to deliver all of it to the repairman next morning.

Dr. Phil Weintraub of Chicago, writes the CORNER that he's so mad he's hitting all the wrong keys on *his* typewriter.

"Attached please find one of the most outrageous pieces of advertising bunk it has ever been my misfortune to run across," he says. "It appeared in the Chicago *Herald and Examiner* on my wife's birthday and spoiled a perfectly good party for me. What are we going to do about it?"

The advertisement is one of those black-type things inserted by an advertising dentist. A dentist is pictured in the act of taking off a Mephistophelean mask. "It takes courage," says the copy, "to lead a cause dedicated to 'tearing away' false impressions, revealing truth and reducing dental prices."

The rest of the space, beyond a crack about "new painless methods from Vienna" is largely devoted to innuendo about ethical practitioners.

Well, what *are* we going to do about it, Phil?

Certainly dentistry is injured by advertisements of this character and the pity of it is that a large section of the public, including many quite intelligent people, make no distinction between ethical dentists and others. They just don't know that there *is* a difference.

Perhaps some of the space to be used by the A.D.A. might be devoted to some *real* mask-tearing. This department would like to have some comments from the faithful little band of CORNER-customers.

From Hong Kong comes a Christmas gift from Dr. M. E. Asger, an unique silver ash-tray in which a Chinese dollar is embedded—an 1899 dollar. At

the moment it holds one of CORNER pipes, about an 1880 pipe, one of those real rich ones which contribute to this department's hard-won solitude: people just put their heads through the doorway, gasp their questions, and leave hurriedly.

From Dr. J. H. Downie of San Antonio, a verse dedicated to Edith Burgdorf, in charge of the copy desk and the Lord only knows what all here at ORAL HYGIENE, and she deserves the tribute:

Oh Edith, clever Edith,
The darling preacherer:
She's the apple of my optic,
Though, gosh I've never seen 'er!

She's got old Mass caboodled
'Bout his advertising stuff;
Blowing windy words up stronger,
Making smooth things out of rough.

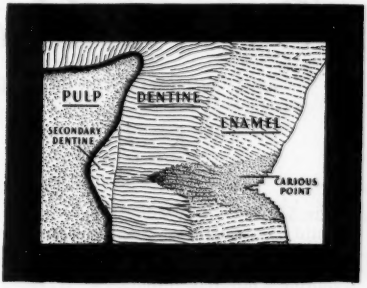
When Mass gets old and feeble,
Minus mind and teeth and hair,
She'll keep ORAL HYGIENE going
When he's planted down for fair.

She'll keep the thing a-going,
Like when Mass is on a trip;
But what in heck will then become
Of Mass's comic strip?

Which leaves just about enough room to thank Dr. Hubert Knight of Syracuse, for saying amen to the CORNER about the independence of dental journals. I wish there were space to print his entire letter. Dr. Walter T. McFall of Macon, wrote similarly.

And the 127th chapter of this department folds up and the red Corona gives place to the Spanish typewriter so that *Mi Rincon* may be written for ORAL HYGIENE'S Edicion Latino-Americana, the readers of which may or may not be palpitating for it.

How threatened tooth protects itself against devitalization. Laying down of secondary dentine results from adequate vitamin D in the diet.



Reduce danger of Pulp Exposure!

This vitamin D food stimulates the laying down of secondary dentine—*aids tooth health at all ages.*

THE diagram above makes clear how Fleischmann's Yeast helps to keep a threatened tooth alive.

As you know, a protective deposit of secondary dentine is laid down inside the tooth when a high degree of carious invasion exists.

But when the body is deficient in vitamin D, this secondary dentine fails to develop properly. The pulp is in danger of exposure. Devitalization often results.

It is highly important, therefore, to assure sufficient vitamin D in the diet. Since nearly all ordinary foods lack vitamin D, dentists have today turned to Fleischmann's Yeast. Specially "irradiated," Fleischmann's Yeast is the richest food in this vital calcifying element.

Tooth health *at all ages*, recent experiments show, depends to a marked extent on the presence of sufficient vitamin D. It helps reduce the spread of caries. It is especially helpful during pregnancy and lactation, when the body's calcium and phosphorus supply is under such a heavy drain.

Help your patients *prevent* tooth troubles by recommending this remarkable food. It's very rich in vitamins B and G, too—and contains other important health properties as well.

Just recommend three cakes every day, regularly.

•

Fleischmann's Yeast may be eaten just plain, or dissolved in water or milk. Advise 3 cakes every day—before meals.

SEND FOR THIS FOLDER

Health Research Dept. D-B-2, Standard Brands Inc., 691 Washington St., New York.

Send me folder on relation of vitamin D to caries at all ages.

*Name*_____

*Address*_____

ORAL HYGIENE

REA PROCTOR McGEE, D.D.S., M.D., *Editor*

February, 1932

PUBLICATION OFFICE: 1117 Wolfendale St., Pittsburgh, Penna.; Merwin B. Massol, Publisher; Lynn A. Smith, Treasurer; T. N. Christian, D.D.S., Assistant Publisher; J. J. Downes, J. W. Kaufman, Associates. Telephone, Fairfax 8300.

Illustrations by James W. Kaufman

CHICAGO: Peoples Gas Bldg.; W. B. Conant, Western Manager. Telephone, Harrison 8448.

NEW YORK: 62 West 45th St.; Stuart M. Stanley, Eastern Manager Telephone, Vanderbilt 3-3758.

ST. LOUIS: Syndicate Trust Bldg.; A. D. McKinney, Southern Manager. Telephone, Garfield 0043.

SAN FRANCISCO: 155 Montgomery St.; Roger A. Johnstone, Pacific Coast Manager. Telephone, Garfield 8794.

LOS ANGELES: 315 West 9th St. Telephone, Tucker 6639.

Please address all manuscripts and correspondence to 1117 Wolfendale Street, Pittsburgh, Penna.

Advertising Index appears on page 462

ORAL HYGIENE

Registered in U.S. Patent Office
Registered Trade Mark, Great Britain

A Journal for Dentists

Twenty-Second Year | FEBRUARY, 1932 | Vol. 22, No. 2

"I'm sorry, Mrs. Whiner, but I'm due at the clinic in five minutes. If it doesn't quiet down in half an hour, put some ice on it and call me in the morning."

MAGIC METHODS *in*

Winning the Child's Confidence

By J. W. CARR, D.D.S.

ONE day I met an old friend leading his small son by the hand. After our greeting I also spoke to the boy.

"Do you know who that man is, son?" asked the father. The answer was a bashful shake of the head.

"That man pulls teeth. Want him to pull yours?" said the father.

After that the boy made it plain that he did not desire my friendship. In fact, I think that in those few minutes, in spite of my efforts to make friends, he checked my name and the names of all my professional brothers from his calling list.

One of my patients found it necessary, as is often the case, to bring her small daughter, Mary, when she came to my office. While the mother was in the operating chair, the child, led by a natural curiosity proceeded to investigate various parts of my equipment, until the mother warned her, "If you don't be good, this man will pull all your teeth out."

Thus, we are labeled to a large number of children, not as a kind person who stops pain and promotes general health, but as a big ogre who extracts teeth for no reason at all except for punishment.

I have not yet been able to discover what pleasure a person derives from giving children misleading suggestions which stimulate fear and will cause trouble for the child later.

Fear is a native instinct which develops with the child, but it is through experience and suggestions from others that we learn what to fear. A child is not afraid of fire until his experience teaches him to be. Then why should a visit to a dental office hold such terrors for him? It is a case where the saying that suggestion is stronger than fact is certainly true. From others he has had suggestions

enough for his imagination to play upon, and, by the time it is necessary for him to visit a dentist, his fears may be highly developed and are apparently only increased by all the nice things the parent now tells him about the dentist.

We are inflicting dire punishment upon any child when we start immediately upon our work with no thought concerning his feelings. He is expecting everything we do to be some form of punishment, and unless we can win his confidence he will probably continue to think so, regardless of how painless is the operation. No doubt you have learned from experience that assuring the child that you will not hurt him is seldom effective. He doesn't trust you and, therefore, cannot believe you.

Now the time comes when Mary, regardless of her fears, must visit a dentist, and by the time she reaches your office due to force on her mother's part, you, as a dentist, are, indeed, to Mary, a cruel ogre, and almost everything you can do is sure to register against you. This time Mary is my patient. I'll be the ogre and you are invited to look on.

Mary arrives. I meet her in the reception room and invite her in, accompanied by her mother, to see my doll house, which is high up, to Mary, on a table in front of the chair. I open a door and ask her if she can see the doll. I place Mary in the chair so that she can have a better view and immediately remove the doll from the house. It can do a trick. I ask Mary to watch the doll closely, and with a wave of my hand its head vanishes. Another wave of the hand and it is back again. A most amusing doll! I open other doors, including the one where the doll's gardening tools (dental instruments) are kept. One door is not opened. Mary is to see in it after I have examined her teeth with the doll's spade. If she wishes she may hold the doll. She does not object to my proceeding with the work now because I have gained her confidence; and winning the child's confidence is the whole secret.

Recently a cabinet was designed in the form of a doll house. Were I specializing in children's work I should consider it a necessary part of my equipment. A doll house from any toy shop or one you could make yourself would be pleasing to any little girl. Even the doll alone, if properly handled, might be enough, or any other simple toy. Personally, I have found a toy with a mystery element, such as the doll with the vanishing head, to be far more effective. You may say that magic is a hobby with me. You are right, for it is. But that doesn't mean that you must adopt it as your hobby to reap the magical results of a few inexpensive tricks. Any magic or novelty shop can supply you with a number of fascinating tricks at a very low cost.

You may think that such a procedure takes more time than you have to spare, but I am

sure you will waste more time trying to do your work with a child who starts to cry as soon as you commence. Then, too, when you gain a child's confidence you are building your reputation and practice. The following account will illustrate some further good which it may accomplish.

A few days after Mary's visit, her teacher, who was also my patient, told me how Mary had arrived at school earlier than usual the next morning, displaying her filling with some pride to the other children. Upon being questioned as to whether it had hurt to have it put in, Mary had replied emphatically in the negative and related in a very realistic manner her thrilling experience with the doll house.

Tommy was another little patient who started to cry as soon as he was placed in the chair. I put a penny in his hand, then a dime beside it. Did you ever see a child who didn't like money? I told Tommy to watch the dime. I held his open hand in mine and with one finger of the other hand rubbed the two coins. The dime disappeared before his very eyes! He searched for the missing coin and I made it reappear in his own hand. The child was delighted with the trick and wanted me to do it again. I promised to do so after I had examined his teeth. He was a very willing little patient, and the parent, who had expected to have quite a scene before the work was finished, was highly pleased. Not more than three minutes had been used to gain the child's confidence, and in gaining it, I was sure that I had won the patronage of that family.

Remember also that these little ones are growing up and that childish impressions are often lasting.

I trust that in my rambling way I have brought to mind some of the reasons why our youngest patients should receive more of our attention, and I hope that in the future you will reap the reward which will surely come to you as a result of your increased thoughtfulness of them.

Dental Journals Important

I consider dental journals of the greatest importance in promoting dental science, most particularly here where mouths are so neglected. Millions need dental attention, but only a few can afford good treatment.

The work done by the dentists working under the Junior Red Cross is very good, but the number in the organization is not sufficient to satisfy the demand, and the work is intended only for school children. We hope that the government will soon create a dental department in the Bureau of Health.—LUCIO C. TAPIA, D.D.S., *Tanauan, Batangas, P. I.*

Avoiding COLLECTION TROUBLES

By I. H. KLINE

The author of this article has been engaged in the task of collecting from dentists for more than twenty-five years, and his only excuse for offering this article is the hope that his observations may be of some practical use to some members of the profession in avoiding delinquent accounts and in promoting future collections.

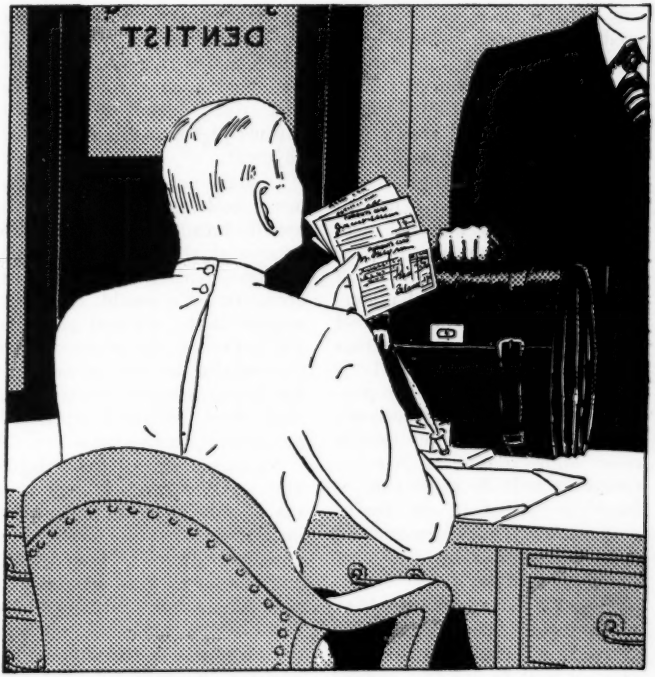
IN the quarter of a century I have been reading reasons for non-payment of accounts I am sure it is safe to say that more than ninety per cent of those excuses could be expressed by these words: "If I could collect my accounts, I could pay you."

Not only does such an excuse indicate that the dentist does not adequately control his own financial affairs, but it also means that he is loading his personal financial burdens on his creditors.

It is obvious that no merchant could remain in business very long if he sold his wares upon the condition that he would receive payment for them if and when his customer collects. Yet that is just what it amounts to when a debtor does not pay because of inability to collect.

I have sincere faith in the integrity of the vast majority of the profession, and I know it is humiliating to such people to be compelled to offer excuses for their financial shortcomings. This feeling would undoubtedly be intensified if dentists happened to remember that such an excuse is a confession of failure in one very vital part of their practices.

Do you imagine a credit-granting business concern could succeed if it operated without establishing a credit department as a safeguard? If a commercial concern, with some actual cash resources, finds it necessary



"If I could collect my accounts, I could pay you."

to exercise common-sense precautions in this matter, how in the name of reason can a dentist hope to succeed financially by the hit-and-miss plan utilized by far too many?

Business concerns will not extend credit without first reasonably assuring themselves of the credit worthiness of the prospective customer; and even with all the precautions they take, they lose some money in bad debts. Yet many dentists, who have no source of income other than that derived from their practices, will not only extend credit without previously investigating the applicant, but they will increase their burdens by using expensive materials in many cases.

I would very strongly urge every dentist to become a member of the local Retail Credit Association, if such service is available. The annual dues could easily be saved many times over by avoiding the loss of one bad account, and that

can only be done by obtaining credit information on every prospective patient. If there is no association in your city, you can obtain information through your bank, or local stores, but not as thoroughly or readily.

The mere knowledge of the applicant's reputation is not all that is necessary. You still must arrange for payment for your services. And take our word for it, a lack of mutual understanding along that line can lead to a lot of trouble. A suggestion here may not be amiss. It is that you do not arrange payments in excess of the patient's ability to pay. If he cannot meet your minimum requirements, it will be preferable to lose the patient in the beginning than to lose him and his good will eventually, and very likely an account.

When your patient buys wares from a merchant he is informed in some way that the account will be due at a certain time, and he is expected to observe these terms. In fact, he is accustomed to terms of sale. Therefore, if you neglect to manifest an interest in this most important subject in your dealings with him, do not be surprised that he fails to become interested.

Even after you have assured yourself of the credit worthiness of your prospective client and arranged for payment for your services, the job is by no means finished. You cannot expect to receive voluntary payment of all accounts according to terms arranged. Some people honestly forget, and some have convenient memories. All of which means that you must follow your plan through to see that your debtor is kept informed of the arrangement for payment.

I shall not attempt to lay out a collection system in this article, because it is intended to treat with the matter of avoiding the creation of delinquent accounts. We would, however, suggest that a printed or written notice of the payments becoming due be sent a week or ten days in advance of maturity. And then followed up until payment is received.

Summarizing all the foregoing, we find three suggestions: the first being to obtain credit information on your prospective patients before a debt is created, and not after it is too late to save you from a credit loss. Ordinary horse sense will dictate the foolishness of extending credit to anybody whose credit record is blemished, unless the account is satisfactorily secured.

The second suggestion is to avoid any possibility of argument about the terms of payment, by having a mutual understanding *before you perform any service;* and, finally, to follow up the collection of your accounts with regularity.

The adoption of these three suggestions might result in the reduction of your gross practice, but it is safe to say that it will result in more actual money in your bank accounts. And money is a mighty handy commodity to have around.

SILENT PERSUASION

By
C. W. BARTON

THE value of motion pictures in the life of the dental profession is no less than the value of motion pictures in the life of the entire nation. And the abuse of the medium of cinematographic reproduction and representation is also no less in dentistry than it has been and actually is in the "movies."

It would be foolish to draw comparisons between the hodgepodge dished up to an indiscriminating public in the red and gold sanctums of real and intellectual dusk, and the demonstration of professional and scientific subjects by living photography.

The movies are very much like music: they have a serious and an amusing side, and as long as these two are kept apart, all is well. The value of motion pictures for dentistry, the same as for any other profession, lies chiefly in the fundamental value of *all* visual presentation for demonstration, instruction, and propaganda, the more so since in motion pictures visualization is not stationary—as in still photography or drawings—but progressive, as in life itself.

In speaking about scientific motion pictures today, one is confronted at once by the problem of the comparative merits and demerits of the silent picture and the sound picture.

For certain reasons, and good reasons at that, I am opposed to the use of talking pictures for scientific purposes; not because of certain still existing technical difficulties — which no doubt will soon be overcome — but rather for purely psychological reasons. A discussion here of these reasons would exceed the space allotted to me; and we shall therefore assume that we are speaking throughout this article about silent motion pictures.

The dental profession is interested in certain well-defined problems beyond the mere conduct of a practice, and beyond also the merely economic aspect of dentistry. Dentistry more than any other profession is in the stage of rapid and manifold changes and development in methods and procedure.

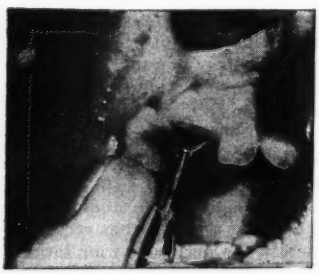
The dentist who leaves the school is by no means at the end of his studies. In fact, as has been so often underlined, the young graduate has received merely the necessary foundation

upon which to perfect himself, and on which to continue the study of his profession.

If, as most dentists have to do, the young practitioner must stick to his practice throughout the year, he cannot afford to spend several months each year in taking postgraduate courses. Neither are conventions an adequate substitute for postgraduate instruction. The study of new methods, new inventions, new discoveries must be brought to the dentist in practice so that he can avail himself of such information in the most convenient manner, convenient time, and without detriment to his practice. The motion pictures seem to be the very best means to this end.

Instead of confining this article to a discussion of motion pictures as a means toward postgraduate instruction, I am anxious to survey the scope of motion pictures in dentistry from a somewhat larger viewpoint, reserving myself the pleasure of discussing the various angles in more detail at a future opportunity.

Dentistry is vitally dependent for its success in most of its branches upon an accurate technique of procedure. Demonstration of such procedure on the patient, in actual practice, is no doubt the ideal method of instruction. But in dentistry particularly there are a great many drawbacks to demonstration of technique in the mouth.



The three views shown here are taken from a dental motion picture.

To begin with, any technique can be best demonstrated on the ideal case; and the ideal case may not always be available. Every technique has some salient features which will result clearly only when the technique is demonstrated on the ideal case under ideal conditions.

In such practical demonstrations, the accentuation of the essential is not always easy nor always possible. When a motion picture is made for the purpose of visual demonstration of a standard technique, ideal conditions can be created: the ideal patient can be selected, the essentials of the technique can be duly accentuated. In other words, the demonstration of the ideal technique by means of a motion picture will always remain ideal, can be repeated an infinite number of times and will still be ideal.

Then, during a demonstration in the patient's mouth, at most two or three persons can clearly see what is going on. When a technique is demonstrated by motion pictures, it is immaterial how small or how large the au-

dience is, because everyone of the twenty, or two hundred, or two thousand members of the audience will see just as clearly as the dentist who is performing the demonstration.

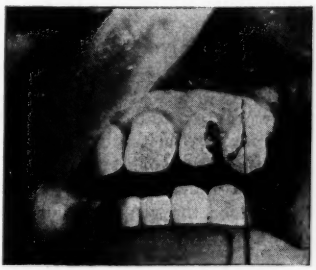
What is more, they will all see the same thing presented in the same manner! Let us take for example the demonstration of the technique of injection of local anesthetic solutions: it is not only the puncture point that is of importance for successful injection, but also the direction which the needle takes, the depth to which it advances, and perhaps certain changes in the direction of the needle while it advances in the tissues.

When four or six dentists are standing around an operating chair watching the demonstration of injection technique, each one of them beholds the motions of syringe and needle from a different angle. Each one of them necessarily takes away with him a more or less different impression.

When he endeavors to duplicate, in his own office, what he has seen demonstrated, he approaches his object from still another angle, namely, that of the operator himself, from which he could not see the actual demonstration because he was not the operator. The result is often failure, or partial failure, to obtain the same results that the demonstrator had obtained.

Now, the camera will present the injection technique from the angle of the operator himself, so that every member of the audience, however large the audience may be, will follow every detail of the technique as if he himself were the operator. Duplication of a technique or a procedure thus shown from the position of the operator himself is easy and most likely to lead to success.

The very nature of dental procedure confines action on a very small field. It is hardly ever practicable for those who assist a demonstration in the patient's mouth to come close enough to study and watch closely every detail. The demonstration of the same operation, on the same limited field, on a large motion picture screen is so much more clearly visible that the smallest details cannot



escape even the most myopic dentist.

By means of telephoto lenses it is possible to take action pictures, say of cavity preparation, in which the entire screen may not show more than the cavity and the instrument. It is no exaggeration to say that there can be no actual demonstration in a patient's mouth so clear as the demonstration on a motion picture screen, because of the tremendously enlarged size of the field of operation.

So much—and it is very little at that—for the use of motion pictures for the demonstration of standard dental techniques.

There are in dentistry a great many matters of the most vital importance, matters upon which entire systems of treatment are based and which, while more or less definitely proven theories, cannot be demonstrated, and may remain invisible forever to the human eye.

This applies to mechanical dentistry as well as to operative dentistry, and to surgery, and to dental science generally. Take for instance, the process of the gradual absorption on one side and growth on the other side of bone tissue during the period of the correction of malposition of teeth. It is true that this process may be illustrated by series of radiographs, which would show the gradual change in the position of the tooth roots, and the formation of new bone.

How much clearer, however, would be the visual demonstration, in continuity, of this invisible process by means of motion pictures. It goes without saying that the process in itself cannot be photographed, because it extends sometimes over several years, and is invisible. But it can be illustrated and reproduced in continuity, from beginning to end, in a very few minutes by animated drawings, based on definite scientific facts. Here is a good example of what dental motion pictures mean by way of visualization of hidden processes.

Changes in periapical tissue, changes in the dental pulp, changes of the tooth structures during dentition, changes of the tissues under treatment, the action of drugs, anesthetics, etc., etc., in the tissues—all this can be beautifully visualized on the motion picture screen. There can be no doubt but that such visualization, even of a theory, is much more impressive and much more lucid than a lengthy treatise. To understand invisible processes, either a very accurate knowledge or a very live imagination is required.

Visual presentation on the motion picture screen requires no more than a pair of eyes and average intelligence. For the further education of the dental profession, both student and practitioner, the scientific motion picture has no equal.

Dentistry is faced with another problem in education beyond that within its own ranks: the education of the public. I am not thinking here of the well known motion pictures produced every now and then for the benefit of children, motion

pictures which are meant chiefly to make the children wish to go to the dentist, if such a thing is possible. I am thinking of motion pictures which will explain to the adult patient all such matters about his teeth and about the dentist's work on them as he will never be able to understand or appreciate, unless he is shown in an unmistakable manner.

To my mind, the promiscuous screening of so-called "educational pictures" for the lay public is of problematic value. It is not possible to cover the entire subject of dentistry in one motion picture; and certain fundamental notions indispensable for a proper understanding of what is being shown is sadly lacking among the lay public. And since a little knowledge is a dangerous thing, I am inclined to believe that the lay public take away from such presentations more wrong impressions than correct information.

I am thinking here of the use to which specific motion pictures made for a specific purpose can be put in the dentist's office. I know a number of dentists who are in the habit of inviting groups of their patients to their offices where they show them interesting motion pictures bearing on the teeth and their preservation and care. I should think that motion pictures, well planned and well made, would be invaluable for the instruction of prosthetic patients.

Well made motion pictures on other phases of dentistry will also be useful for the demonstration of dental work that is contemplated in a certain patient's mouth before the work is undertaken, so as to make the patient understand what it is all about and what he may expect.

In the May, 1931, issue of *The Journal of Chemical Education,* Charles Alexander Richmond, of Union College, Schenectady, New York, says: "I suppose very few doubt that there is certain educational value in moving pictures. On the other hand, I fancy it is safe to say that very few realize the immense possibilities of the motion picture. We have here an instrument which not only can impart and disseminate useful knowledge, but which can, and often does, stimulate a deeper desire for knowledge."

In the dental field, the possibilities of the motion picture, as I have tried to point out, are just as immense as in the chemical field or in any other scientific endeavor.

For the instruction of the student, the motion picture is invaluable. As Mr. V. C. Arnspiger aptly says, motion pictures in no sense are intended to replace the instructor: "It would be idle to suppose, for example, that any series of pictures, no matter how complete, could function as an instructor in making necessary adjustments to individual student needs." The contribution of the motion picture, as this author says, therefore, must not be in supplanting, but in supplementing the work of the instructor, the

chief function of motion pictures being to enrich the curriculum.

For postgraduate instruction, as well as for the propagation of new procedure, the motion picture is outclassed by no other medium.

It remains to say that for the training of the young student in the handling of his patients, and for the education of the dental assistant and the dental hygienist in the handling of a dentist's clientele, motion pictures cannot be surpassed in value and efficiency.

All in all, the motion picture screen should find, with due discretion and due care, its rightful place in the life of the dental profession, not as a substitute for anything that exists, nor as an amusing toy and entertainment, but as an invaluable supplement to practically all dental activities.

George Eastman Honored

Dr. Martin Dewey, president of the American Dental Society, unveiling a plaque in appreciation of the generosity of Mr. Eastman in endowing the Rochester Dental Dispensary for Children. In ceremonies in Rochester on Saturday, January 9, Mr. Eastman was also made an honorary member of the New York State Dental Society. The plaque was given by the Rochester Dental Society.

DENTISTRY'S Next Ten Years

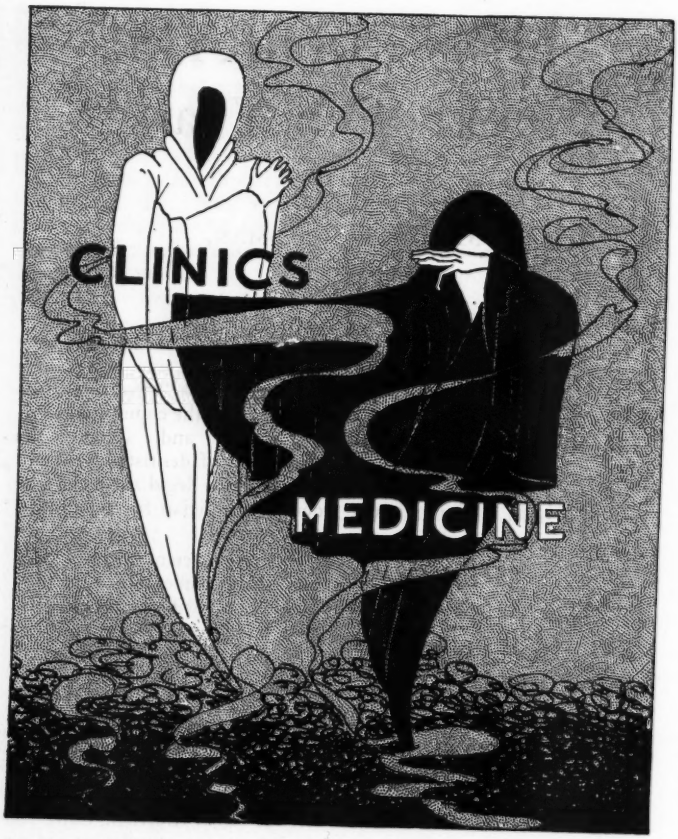
By

M. HILLEL FELDMAN,
D. D. S.

Last month, at ORAL HYGIENE'S request, Dr. John Bell Williams in "The Best Prophet of the Future Is the Past," peered into Dentistry's future—the next ten years. Now Dr. M. Hillel Feldman presents his view of the coming decade.

DENTISTRY is going forward to greater achievement for itself and for humanity. The next ten years hold out a promise and a realization of our hopes and our responsibilities. I am not a prophet of doom! On the far-off horizon, I can see the cleared atmosphere of confidence dispelling the clouds of doubt, fear, and indecision. I can see dentistry making gigantic strides of progress which will far outdistance those who would hold her back with their pessimistic whisperings. What has dentistry to fear? Those who entertain a gloomy outlook bring forth two ghosts: first, the communal service clinics, and, second, the absorption of dentistry by medicine and the legalization of the dental technician for restorative oral work.

Everyone seems to have been agreed for some time that only a small minority of the population has been availing itself of the services of the dental profession. From some sources the number is said to be so low as three per cent. If that be true, the establishment of many communal service clinics by private endowment or state subsidy would be an excellent thing for society and a wonderful aid to dentistry in its aims to render a greater service to humanity, and give to society a greater share of the benefits of its scientific perfection. It is difficult to see how subsidized service clinics will materially affect the economic status of the individual dentist. Subsidized dental clinics will create a demand for good dentistry and the profession cannot



The two ghosts

fail to benefit economically. In many instances, these clinics will afford remunerative employment to dentists who are skillful yet unable to establish a successful private practice. If there are isolated instances of individual dentists losing their practices, due to the "competition" of the clinics, the individual is most likely responsible for his failure. He cannot lose a practice which is established on a basis of personal confidence and integrity, good reliable service, and fair charges. If the clinic sends such

a man to seek supervised employment, society has been well served. Such an evolution is in the line of progress!

I compare dentistry with academic education in this country. Even though the state should establish dental centers for the service of its citizenry, private practice must and will be in demand, and that demand will be greater than now! With all the local and state educational institutions which young men and women can attend with little or no outlay on their part, are not privately endowed educational centers crowded to the doors with ever-increasing numbers of applicants? The average of intelligence is said to be increasing, and, with this increase, larger demands for more efficient service in all branches of human endeavor are created. For dentistry it means more ample demands, an augmented field of service to society, growing economic returns to the individual dentist.

As to the second spectre: Will medicine absorb dentistry? My answer is emphatically No! I fail to see why it should be necessary for a dentist to go into a study of the body in all the detail necessary for the physician. The dentist needs for an intelligent practice of his profession only a thorough fundamental review of the biologic sciences which a Class A college of dentistry can and will offer to students in the next ten years, and within a time limit to allow a man to launch a practice while he is still young. As things are today the years of education are already too much prolonged. I believe a condensed curriculum, eliminating long vacations, would permit a dentist to attain his necessary training by the time he reaches the age of twenty-one or twenty-two. Much time is undoubtedly wasted. Society has nothing to gain from having dentistry practiced by physicians instead of the specially trained men.

The sober judgment of the American people will not countenance any such radical change as that of doing away with the dental degree and putting technicians to work on their mouths. That would be not progress, but retrogression.

Dr. Edward C. Mills, secretary of the Ohio State Dental Society and librarian and founder of the Ohio Dental Library, is eager to obtain the fourth and sixth editions of *Polk's Dental Register*.

Dr. Mills may be reached at 255 East Broad Street, Columbus, Ohio.

What Importance

DIET?

WHAT is the dentist's interest in diet? How can he apply the principles of diet to his practice, and what may he expect in clinical results?

In an effort to determine the importance the dental profession is placing upon the subject of diet, ORAL HYGIENE sent a questionnaire to 5000 dentists, selected at random in the various states, and asked their opinions on the above questions.

There was nearly a 20 per cent response—935 readers replying.

The results of this investigation prove conclusively that the profession considers diet an important and determining factor in the oral and systemic health of patients.

The answers to these questions will tell the story in a more forceful manner than any comments that might be made upon them, so we will present the questions and the answers received.

QUESTION 1

Do you feel that diet has any important relation to prevention of dental caries

(a) in children?

(b) in adults?

(a)

	Number	Per cent
Yes	904	96.7
No	11	1.2
Some	5	0.5
Don't know	6	0.6
No answer	9	1.0
	935	100

(b)

	Number	Per cent
Yes	768	82.1
No	71	7.6
Some	57	6.1
Don't know	23	2.5
No answer	16	1.7
	935	100

It will be noted, in comparing the answers to this question with those of the following questions, that the opinion is exceptionally favorable to the recommendation of a correct diet, especially for children. It is very probable that dentists have had a better opportunity to study and compare the results

The summary of an investigation wherein 935 ORAL HYGIENE *readers give their opinions on the importance of diet.*

of the prevention of caries than those of other oral disorders. The results would also be discernible more quickly in children.

QUESTION 2

Do you consider dietary deficiencies, such as lack of calcium and other elements, a basic or potent cause of caries or pyorrhea?

	Number	Per cent
Yes	714	76.4
Caries—Yes Pyorrhea—No	71	7.6
Contributory	14	1.5
No	47	5.0
Caries	39	4.2
Pyorrhea	6	0.6
Not in all cases	5	0.5
Don't know	14	1.5
No answer	25	2.7
	935	100

In analyzing the foregoing figures we find that 91.1 per cent believe that dietary deficiencies are basic or potent causes of caries or pyorrhea. It is interesting to note that a greater percentage of the dentists believe caries to be more directly attributed to incorrect diet than pyorrhea is.

QUESTION 3

What, if any, relation do you believe exists between pyorrhea and a diet deficient in vitamin C (antiscorbutic)?

	Number	Per cent
Very close, Close, Direct, Marked	398	42.6
None	117	12.5
Contributory	36	3.9
Lowers resistance	11	1.2
Slight	12	1.3
Don't know	147	15.7
No answer	214	22.9
	935	100

QUESTION 4

What do you regard as the most important causative factor in

(a) pyorrhea?
(b) caries?

(a) Pyorrhea

Uncleanliness, Neglect, Lack of oral hygiene	389
Diet	284
Trauma	165
Calculus	160
Systemic condition	124
Lack of tissue tone	35

Heredity	28
Poor dentistry	26
Don't know	24
Improper mastication	22
Poor elimination	20
Acid condition	15
Food fermentation	13
Faulty formation	6
No answer	33

[Note: Many listed two or more causative factors. The majority of the answers were not listed in any special order, so the total numbers here indicate how many times each cause or factor appeared in the answers, regardless of whether it was listed first, second, or third.]

(b) Caries

Uncleanliness, Neglect, Lack of oral hygiene	383
Diet	509
Trauma	10
Calculus	15
Systemic condition	75
Lack of tissue tone	4
Heredity	36
Poor dentistry	5
Don't know	19
Improper mastication	13
Poor elimination	6
Acid condition	76
Food fermentation	39
Faulty formation	51
Bacteria	7
No answer	47

Again we note that faulty diet is considered the most important causative factor in dental caries but not in pyorrhea. Neglect, uncleanliness, and lack of oral hygiene are considered of first importance in the cause of pyorrhea, with diet coming a close second.

QUESTION 5

Do you make diet recommendations to
(a) expectant mothers?
(b) other patients?

(a)

	Number	Per cent
Yes	851	91.0
No—refer to M.D.	58	6.2
Occasionally	10	1.7
No answer	16	1.1
	935	100

(b)

	Number	Per cent
Yes	801	85.7
No	60	6.4
Occasionally	56	6.0
No answer	18	1.9
	935	100

It will be noted that in recommending diet to expectant mothers, 92.7 per cent state that they make regular or occasional suggestions. The percentage in part b is only 1 per cent lower, indicating a very decided interest on the part of the average practitioner.

QUESTION 6

What success have you had with patients through diet
(a) in preventing or arresting pyorrhea?
(b) in preventing or arresting dental caries?

(a)

	Number	Per cent
Good, Good with co-operation	236	25.2

Fair	204	21.8
Don't know No follow-up Do not recommend	137	14.7
Poor—Lack of co-operation	74	7.9
None	189	20.2
No answer	95	10.2
	935	100

(b)

	Number	Per cent
Good Good with co-operation	273	29.2
Fair	217	23.3
Don't know No follow-up Do not recommend	136	14.5
Poor—Lack of co-operation	69	7.4
None	134	14.3
No answer	106	11.3
	935	100

The answers to these questions serve to present a clinical picture of the application of diet in the average dental practice. The answers indicating a good or fair response average almost 50 per cent, which is favorable, considering the fact that approximately 25 per cent do not recommend diet, do not follow up results, or did not answer the question.

QUESTION 7

Are results more readily apparent in children or in adults?

	Number	Per cent
Children	633	67.7
Adults	53	5.7
Both—Equal	39	4.2
Don't know	65	7.0
None	8	0.9
No answer	137	14.7
	935	100

In referring again to Question 1, it will be noted that the results with children seem to be more apparent and that there appears to be a greater indication for the recommendation of diet for this type of patient.

QUESTION 8

Do you consider that an acid mouth results in injury to the enamel of teeth?

	Number	Per cent
Yes	691	73.9
No	150	16.0
Slightly	28	3.0
Don't know	38	4.1
No answer	28	3.0
	935	100

This question was intended to discover whether dentists used diet to control the acidity of the mouth and system in general.

The large number of affirmative answers indicates that many dentists do endeavor to regulate mouth acidity by the recommendation of certain foods.

SUMMARY

Some of the comments that accompanied the answers to the questionnaire will give an excellent idea of the importance many dentists place on diet:

"Personally, I think that diet is the best treatment and can

accomplish remarkable results."

"When patients of from 50 to 60 years of age come into my office with good teeth, I always ask them about their diet. I have been doing this for fifteen years and invariably they tell me that they eat a large variety of food, especially uncooked or natural food."

"I am 55 years of age and my teeth are in excellent condition. My diet is quite general, but every day I eat something that is raw, such as lettuce, oranges, grapefruit, etc. I firmly believe that diet is the controlling factor in both pyorrhea and caries."

"I always advise fruit juices after meals and thorough cleaning of teeth semi-annually for best results."

"I consider diet everything in regard to teeth at any age. Given a proper diet people will not have pyorrhea."

"It is becoming more and more my practice to consider the teeth and their supporting structures as a part of the alimentary canal and as subject to disturbance and disease whenever the normal processes of metabolism are interfered with, due to faulty diet, occupational peculiarities, bad habits of living, etc."

"In my study and observation of pyorrhea cases I have found that upon questioning the patient closely there is nearly always a lack of vitamin C, namely, an absence of fresh vegetables and acid fruits, and an excessive amount of meats, etc., in the diet. Nearly every case seems the same—a spongy condition, sometimes with ulcerations of the gums, hemorrhages into the tissues and from the mucous membrane. I believe that there must be an absorption of ptomaine from canned fruits in these cases."

"I believe that the failure of proper calcium nutrition and assimilation causes considerable tooth decay among children."

"The investigation of the North Carolina State Board of Health, in its examination of school children, shows that the best teeth are found on the seacoast where the diet, fruit, and seafood, is most highly calcium."

A Suggestion

In an article published recently in ORAL HYGIENE,* Dr. Michael Peyser asks what is the basic remedy for the frightful economic condition of the average dentist, and he also remarks that nearly all dentists are cursed with an overabundance of ungainfully employed hours. The remedy is very plain: reduce the number of dentists.

If all the dental schools in the United States would close for ten years, there would at the end of that time still be enough dentists to take care of people who want to go to dentists.—H. M. SCHAEFER, D.D.S., *Chicago, Ill.*

*ORAL HYGIENE, August, 1931, p. 1753.

Tempus FUGIT

Twenty years ago this month.

The Advantages of Being a Hog

The February issue of ORAL HYGIENE twenty years ago carried an interesting article by Dr. George Edwin Hunt, then editor of the magazine, in which he sounded the keynote to the oral hygiene problem. He said:

"The oral hygiene problem is an economic and sociologic one.

"Some years ago, when the campaign against tuberculosis was in its infancy, some congressman of great faith but meager discretion introduced a bill in Congress which, if passed, would have appropriated $10,000 of the people's money for the purpose of investigating the causes of tuberculosis and the best means for its prevention. The bill was promptly referred to the committee on acoustics, or gilding the capitol dome, or something like that, and henceforth was known of man no more. At that same session a bill was introduced and passed, appropriating $25,000 for the purpose of investigating the causes and prevention of hog cholera, which led Dr. J. N. Hurty, secretary of the Indiana State Board of Health, to enlarge publicly upon the advantages of being a hog instead of a man, in these United States.

"If you are a grower of hogs or cattle or horses and an epidemic threatens to destroy them, the Department of Agriculture will, on your request, send you an expert to look after your live stock and bring them through to a state of health. If you are raising corn or wheat or cotton or beets and something goes wrong with your crop, the government stands ready to put at your service its vast machinery for ascertaining and overcoming your difficulties. But if you are engaged in merely raising children, future citizens of your country, the government's willingness and ability to assist you in bringing them up scientifically is farcical as compared with the help it can extend to you in keeping the boll weevil out of your cotton or 'lumpy jaw' from spreading amongst your cattle."

XIV—DILEMMAS OF DENTISTRY

The Case *of* DR. JONES

(*Continued from January*)

By EX-DENTIST

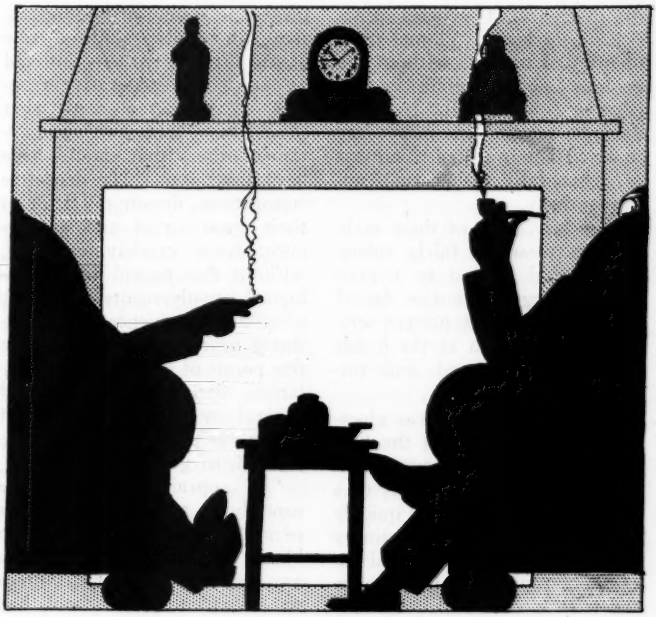
Ethical Performance

ONE dreary, rainy evening, as Doctor Clarke and I were chatting together, reminiscently, in his cheery den, he remarked: "When I started practice, Doctor Jones, I conceived ethics, particularly in its relation to patients, to be a matter of simple honesty that any well-intentioned dentist could apply without undue difficulty. Since then, I have found that there are many different conceptions of honesty.

"Ethics, usually, is termed the science or doctrine of human character. But it seems that for the purposes of professional ethical *performance*, character and the moral qualities which it implies are hardly sufficient. To these we must add knowledge, means, and freedom from opposing ethical obligations.

"I can recall instances of dentists of high moral aspirations who practiced unethically through ignorance of ethical philosophy; of others who possessed excellent knowledge of ethical theory but who performed unethically through lack of heart or for want of ethical instinct; and of still others, endowed with both ethical instinct and knowledge, who failed in the practice of ethics through lack of means, through opposing ethical obligations, or through the force of still other circumstances.

"In reviewing my own career and also from observation of others, I have come to the conclusion that a full understanding of ethics is rarely fully absorbed in school, and that the more complete comprehension of this subject, with respect to both theory and performance, develops most frequently through experience in practice and through the gradual elimination of anti-ethical elements.



One dreary, rainy evening, Doctor Clarke and I were chatting together, reminiscently, in his cheery den.

"Upon graduation," continued Doctor Clarke, "I, of course, determined to practice ethically. I have never been conscious of any weakening or departure from this resolve. Nevertheless, I have committed many acts in practice that I now consider unethical, and which I would not now wish to repeat.

"Doubtless, in the future I will consider some of my present practice procedures unethical. To a sincere student of the subject, ethical performance seems a constantly broadening conception, without limits. Each new ethical consideration discloses another, and there appears to be no possibility of attaining finality in this field.

"Unfortunately for some of my patients in the early days of my practice, the dental school from which I graduated failed to provide the much more thorough instruction that now generally seems to prevail. It was tacitly conceded at that time that the first few years of practice after graduation were needed to provide much of the professional knowledge and skill required to meet the ordinary

contingencies of general practice. Consequently, I met most of my first patients without the assurance of adequate knowledge or proven skill. In many of these cases, I am now sorry to say, I administered treatment experimentally rather than authoritatively.

"Luckily, most of these early patients possessed fairly robust health, and seemed to require only the regular routine dental services that rarely present serious hazards, even at the hands of an inexperienced and unskilled dentist.

"On the whole, I was pleasantly surprised during the first few months at my success in execution. Being naturally of a mechanical turn, I quite quickly mastered the knack of ordinary extractions. I injected local anesthetics copiously, and was delighted to have many of my patients assure me gratefully that their teeth had been drawn with little or no operative pain. I seemed to meet little difficulty with fillings and other operative restorations, and felt quite proud at the time of my handiwork in these specialties. My prosthetic work proved to be less uniformly successful, but I had been informed that this was to be expected. Altogether, most of my patients appeared to be at least moderately satisfied. Only a few of them made any outspoken complaint, and I felt quite encouraged.

"Of course I realized later that much of my service to patients during that period was lamentably deficient. I employed no system of administrative safeguards. Quite a few of my surgical patients suffered avoidable postoperative troubles. I extracted teeth that should have been saved, and retained others that should have been taken out. My operative restorations, despite my pride in their construction and appearance, were crudely executed, without due regard for pathological involvements or other ultimate consequences. My prosthetic productions lacked those fine points of accuracy in articulation, fitting, aesthetics, and general workmanship upon which their usefulness and enjoyment so greatly depended.

"In appraising my practice procedures and results of that period, I am not inclined to blame my defects in practice to any special lack of ethical intent on my part. My school had given me its full measure of dental education and had certified me to be a dentist qualified and competent to serve and protect the public. The state also had made some test of my professional abilities, and had found them adequate. I accepted the judgment of these high authorities without question.

"Consequently, whatever moral culpability attaches itself to the quality of service rendered to my patients during that time seems to rest largely upon my school, and, perhaps to some lesser degree, upon the state requirements.

"Perhaps, however, the school and state could also plead some measure of exoneration on the

grounds of limiting circumstances beyond their control, and on the claim that their functions were performed in accordance with the status and development of the dental profession at that time.

"Several months after starting, I attempted my first extraction of an impaction, and, after working on it unsuccessfully for about forty minutes, became apprehensive and referred the patient to a near-by dentist of much longer experience, who performed the operation with dispatch and success.

"My failure with this extraction not only disturbed my professional vanity, but also made me feel that there might be something wrong about my having attempted the operation.

"It was impossible to escape the conclusion that I had needlessly and wilfully endangered and distressed my patient by attempting an operation for which I was unqualified by special knowledge or experience, and that I would have served my patient much better by sending her in the first instance to the more competent practitioner to whom I was ultimately compelled to refer her.

"This episode left an uneasy feeling of professional inadequacy. I consoled myself partially, however, with the reasoning that dentists, as a rule, were expected to develop knowledge and proficiency after graduation through experience and experiment, and that any unfortunate results to patients during the acquisition of such knowledge and proficiency simply constituted unavoidable and necessary incidents of the process.

"During the first two or three years, quite a few other patients presented themselves who required forms or details of treatment of which I had no adequate knowledge or former experience. With the exception of one of such patients, who exhibited conditions so alarming that I referred him immediately to the local hospital, I tackled them all.

"My results with this type of patients varied. In a small proportion of instances I seemed to succeed fairly well. With the remainder my results could not be considered at all satisfactory. A few of them, after I had struggled ineffectually with their ailments, I ultimately referred to other dentists or specialists. The rest either resigned themselves to the deplorable results of my treatment, or may have visited other dentists, without my knowledge, in search of more competent service.

"It finally dawned on me that perhaps I was unfair both to my patients and myself in attempting treatment of conditions for which I had not been specially qualified. The small percentage of complete successes did not seem to compensate for the much larger proportion of total or partial failures.

"The suffering, discomfort, and disappointment which my treatment of this type of cases inflicted upon patients; my growing distaste and apprehension in undertaking such cases;

the suspicion that these failures were affecting my professional reputation, and perhaps the moral phases involved eventually led me to the decision to restrict my practice exclusively to those simpler dental services which I could undertake with more confidence of reasonable success and satisfaction.

"Accordingly, I excluded from my practice all services that appeared to involve abnormal pathological or surgical conditions, and all operative or prosthetic work that seemed to present unusual contingencies. This limited my practice almost wholly to simple extractions and certain standardized types of operative and prosthetic restorations.

"After practicing in this circumscribed fashion for some time, I happened to attend our state dental convention, and, while there, drifted into conversation with a Dr. Stevens, an attractive, likeable chap some years my senior.

"After we had exchanged the usual professional amenities and warmed up to each other, we started to confide our respective experiences in practice.

"In the course of these mutual disclosures, I outlined the limitations that I had placed upon my practice, and the reasons that had prompted me to do so.

"This seemed to interest Doctor Stevens, and after I had explained myself fully he mused a moment or two and said: 'Doctor Clarke, our acquaintance is so new that I hesitate to make any critical estimate of your practice policies.'

"On my assurance that I would welcome a frank expression, he continued: 'It seems that quite a number of dentists are restricting the functions of their practice just as you have done, and very much for the same reasons. This, in my opinion, is a step that takes dentistry back to its handicraft stage of my grandfather's time.

" 'My grandfather was taken out of school at the age of thirteen and apprenticed to a barber dentist in England. At the expiration of his apprenticeship, he established himself as a master barber dentist on his own account.

" 'In addition to barbering, he extracted, cleaned, filled and crowned teeth, and also supplied artificial teeth on plates. He treated minor oral complaints, such as excessive bleeding, inflammation, simple infections, and so forth, with varying degrees of satisfaction. Later in his career he administered local and general anesthetics.

" 'He refused, however, to extract teeth or to administer treatment to persons suffering from abnormal conditions or symptoms beyond his experience. These he usually referred to the local physician or surgeon.

" 'Now it seems to me,' continued Doctor Stevens, 'that dentists, in attempting to exclude the hazardous abnormal patients, are reverting to my grandfather's style and scope of practice.

" 'There is nothing, of course,

inherently wrong in doing things on old-fashioned lines. But in this case there are other factors to consider.

" 'Grandfather, perhaps even though judged according to present-day standards, performed very passable dentistry. His skill in the extraction of the ordinary run of teeth, and even of some exceptional types, might compare not unfavorably with the average execution of such operations now. His crowns and fillings were carefully designed and constructed and highly serviceable and durable, if considered in their mechanical aspects. Many of his plates were praised for their fine workmanship, fitting, and natural appearance.

" 'Yet grandfather was simply a workman, without formal education. He followed the occupation of dentistry as a trade, without any thought or claim to professional status. He was ignorant of most of the present-day prophylactic and therapeutic developments of dentistry. He possessed no adequate conception of the vital reciprocal relations existing between the oral cavity and the remainder of the body, and he had little knowledge of the large variety of diseases that may arise through oral infection. We cannot doubt, now, that, due to this ignorance, some of his work must have resulted in injury to the health of his patients, and in some instances even may have shortened their lives.

" 'Dentistry to him was much like barbering, an occupation depending for its success upon proficiency in manipulative and mechanical skill, and upon experience and care in handling the materials used in his work. Obviously, dentistry plied on these simple and limited lines can lay no logical claim to the rights and privileges now professionally accorded to dentistry.

" 'Dentistry obtained professional recognition through its claim to be the dental arm of medicine, charged with important prophylactic and therapeutic functions in the pathological, surgical, and operative fields. In other words, dentistry, in graduating from handicraft to profession, assumed responsibility for those dental diseases and oral abnormalities that formerly had been considered the province of the physician and surgeon.

" 'If this is so, dentistry now cannot very well repudiate the inherent responsibilities attached to its professional claims. What would be thought of the physician who confined his services to simple ailments in their early stages and refused to treat more serious, menacing conditions, or of a surgeon who restricted himself to simple operations that presented almost no dangers and declined to perform those of a grave and imperative character? The recognized ethics of medicine to relieve suffering, cure disease, and save life under any and all circumstances prohibits such professional policies.

Of course there are, and presumably there always will be, specialties in dentistry and other of the professions that are be-

yond the scope of the general practitioner. I am not inferring that it is unethical for the dentist to refuse to treat cases that come within this category, or that he should not refer them to specialists. But whenever a dentist fails to equip himself adequately for all of the generally accepted technical responsibilities of dental practice, and, because of this failure, systematically declines to render services to patients suffering from hazardous and abnormal dental conditions that come within the scope of modern general dental practice, such dentist is still in the artisan stage, and seems to have little if any right to professional title.

" 'Furthermore, the dentist who avoids pathological, surgical, or general health problems, usually fails to do justice to his apparently normal patients. Most people, at some time or other in their lives, suffer from dental conditions immediately or ultimately detrimental to their general health. The accompanying symptoms do not always lie in full view. They are discoverable, in many instances, only through painstaking and exhaustive diagnosis. Therefore, the modern dentist who is not in the habit of searching for such symptoms, or is unable to recognize them, is not fulfilling his professional obligations and is practicing under false colors, for which there is no ethical defense.

" 'Now, Doctor Clarke,' continued Doctor Stevens, 'your predicament, as you describe it, seems to limit you at this time to two courses, both of which are harmful and consequently against the public interest. One of these is to disregard the welfare and safety of your patients by attempting to give needed dental services of which you are not fully capable; the other is to refuse to perform such services, and thereby evade your professional obligation to provide the special knowledge and skill which your degree and license impose upon you. The first is the sin of commission, the second of omission. It is difficult to determine which of these in the end is more generally harmful.

" 'In weighing the ethics here, we must, of course, bear in mind that the science of dentistry is now, and no doubt will continue to be indefinitely, in process of evolution, which must result in a progressive and perhaps never-ending accretion of new knowledge and greater skill, and, therefore, the dentist cannot be held morally accountable for the application of knowledge not yet discovered or for skill not yet attained.

" 'For instance, no blame could attach itself thirty years ago to a dentist for a failure to use x-ray in diagnosis. This precautionary means was then beyond the knowledge, skill, and availability of the profession. But any dentist who neglects this procedure now can be held both morally and legally responsible for any injury to his patients that could have been obviated by x-ray procedure. In

other words, the dentist is responsible for the application of professional knowledge and skill in accordance with the latest advances and accepted modern standards.

" 'Boiled down, it resolves itself into a matter of fundamental honesty. Dentists hold themselves out as specially and fully qualified for practice. This claim is corroborated by their degrees and licenses. The public is invited to place itself unreservedly in their hands. Naturally, therefore, if a dentist fails to cure, or perpetrates injury through failure to apply knowledge, skill, or means generally available to his profession, the patient properly feels wronged and cheated. I am sorry, Doctor Clarke, if my remarks appear to condemn your practice policy. Unfortunately, any impartial analysis of the facts can lead to no other conclusion.'

" 'Dr. Stevens,' I interrupted, 'your exposition of my defects is only too convincing. Worse still, you place me in a dilemma from which there appears to be no avenue of escape. You condemn me for attempting to execute certain services, and condemn me equally for refusing to perform them. Is there no way out? Do you mean that I should retire from practice?'

" 'I admit,' Doctor Stevens replied, 'that your acceptance of my views places you in an awkward predicament from which there is no immediate, complete escape. I have no idea, however, of advising you to relinquish practice. Many other ultimately highly ethical and successful dentists have worked themselves out of the same dilemma.

" 'A surprisingly large number of dentists in the past have been faced with the problem of starting to learn most of the practical elements of their profession after graduation. Some of them probably made little effort to acquire this needed knowledge and skill, and seemed content to proceed in a narrow, blundering way, limiting themselves to simple standardized mechanical productions and ordinary extractions, and disregarding almost wholly their prophylactic and therapeutic opportunities and obligations. These men never acquired the concept of professional responsibility, nor the ability to meet it.

" 'Others, however, possessing a broader cultural background or a more ethical instinct, or perhaps a clearer vision of professional scope, realized that the inadequate and imperfect instruction received at their dental colleges constituted only a weak beginning upon which, in justice to themselves, their prospective patients, and their profession, they must build more solidly and broadly by renewed and persistent search for additional knowledge and skill. It is to this type of practitioner that we must be grateful for much of the advance in dental science.

" 'In this connection, I recall a dentist who, after coming to a realization of his lack of qualifications for sound practice, closed his first office and apprenticed himself for a year at a

nominal salary to another, well-established dentist of excellent reputation. At the end of this apprenticeship he worked, successively, for two other highly reputable practitioners, six months with each. Thereafter, he obtained employment in a large dental laboratory where he served almost a year. During all that time he took whatever postgraduate courses he found available, and accumulated a small, select library of dental literature which he studied with zeal.

" 'Immediately after leaving the employment of the laboratory, he resumed practice, with unusual success. He is now one of the outstanding professional figures in his part of the country. He is still an eager student of dentistry, and, in addition to his regular, continuous research, devotes an entire month annually to a review and study of the advances and discoveries of dental science during the preceding year.

" 'In a chat with him a short time ago he told me that he considers his postgraduate preparations equally, if not more, important than his school work in equipping himself for practice, and that, in his opinion, no graduate should practice without supervision until he has served at least two years' apprenticeship with one or more carefully selected, busy, general practitioners.

" 'He qualified this statement, however, with an expression of expectation that the dental schools, by continuing to raise their standards and improve their methods and thoroughness of instruction, would ultimately make such postgraduate preparation for practice much less essential.

" 'This, however, he stated, would not relieve practitioners of the necessity of constant study of current advances in professional knowledge, as dental science now is developing so rapidly that failure to keep pace with it may deprive patients of substantial benefits.

" 'The efforts of the dentist just cited to qualify himself for efficient practice illustrates one instance of overcoming your present predicament. Other dentists have conquered the same problem in various degrees in other ways. One dentist of my acquaintance practiced three days per week in his own office, and spent the remainder of his time under the instruction of oral specialists. Another purchased a part-interest in a practice conducted by an elderly dentist of outstanding qualifications, and placed himself under his partner's instructions. A third joined a group practice consisting of four other members, and submitted all problems affecting his own patients to the judgment of his associates.

" 'All of these dentists pursued the same objective, namely, to improve their qualifications for efficient practice and to escape the unethical and harmful alternatives of attempting or refusing to render dental services beyond their ability.

" 'The variations in the meth-

ods for self-improvement that I have just enumerated, or of others that might be used, naturally produce different degrees of proficiency. You may rest assured, however, that whenever a dentist possesses professional ambition, ethical conception and the determination that he must qualify himself to the limits of his capacity to provide his patients with the full knowledge and skill that dental science has made available, he will find some way of approaching his goal.

" 'Therefore,' concluded Dr. Stevens, 'I feel quite sure that you will manage in some way to develop for yourself an ethical standard of professional efficiency.'

"This chat with Dr. Stevens," continued Dr. Clark, "impressed me so forcibly with the ethical necessity of qualifying myself more thoroughly and broadly in modern dental science that I lost no time in trying to devise ways and means for the accomplishment of this purpose."

[*Doctor Clarke tells in March how he qualified himself to practice dentistry along the lines Dr. Stevens suggested.*]

Acme

Three fourths of the children in Philadelphia have decayed teeth, Secretary of the Interior Ray Lyman Wilbur declared at a meeting of the Philadelphia Mouth Hygiene Association recently. Secretary Wilbur is seen talking to a young patient in one of the motorized dental clinics in Philadelphia.

"Dear Oral Hygiene—"

"I do not agree with anything you say, but I will fight to the death for your right to say it."—*Voltaire*

"Dentists Should be Urged to Open Minds on Advertising"

The retiring president of the Chicago Medical Society, Dr. James H. Hutton, believes medical men should open their minds about advertising. Dr. Hutton urged an investigation of advertising possibilities.

Dr. Hutton's words should be given serious consideration not only in the medical field but in the dental. It's about time for someone to have a little courage and come out in the open with his ideas.

Dr. Hutton said, "Important sections of organized American medicine have looked upon advertising as an evil for medicine; this also pertains to organized American dentistry. This has been due I now believe to lack of comprehension or lack of information, or maybe both."

Advertising in its proper form has proved itself to be one of the greatest weapons for development and progress in modern times.

Dental men should join hands with publishers and advertising experts to study the problem, learn whether advertising will help organize dentistry, and if so, then adopt the forms dental societies should take.

Dental magazines tell the dentists through their columns about the misleading tooth pastes and mouth washes, etc., but how about the public? Advertise dentistry, let them know about it.

The makers of a certain kind of tooth paste spend thousands of dollars advertising their product. And every so often one of my patients will come into my office and quote their "See your dentist at least twice a year." This is just an example of what advertising will do.

I am an ethical man 100 per cent—not 50 per cent—and what Dr. Hutton has said is not only food for thought but something that should demand action.

Statistics show that six billion more cigarettes of one brand were sold in 1930 than were sold in 1929 because of news-

paper advertising. In 1931 there is indicated a still greater increase in sales. Credit for this increase is given to newspaper advertising. Immense gains have been made also in sales of cigars which were advertised in newspapers. Statistics show that six manufacturers of different commodities have increased their sales during this depression through newspaper advertising.

A small number of the people do not think about their health and appearance until their vital resistance is so lowered that they are forced to call a physician. If the sickness has them in such a state that there is no possible chance for recovery they expect the physician to do the impossible. The same applies to the dentist: when a person's mouth is full of cavities, broken down teeth, periodontal diseases, etc., and they have no pain, everything is fine; but just let that person have a toothache and watch him rush to the nearest dentist for treatment. In most cases they come too late and the tooth has to be extracted.

Why not let those poor unfortunates who are ignorant of the fact know that their health is in danger, their appearance may be marred, etc., if the oral cavity is not in a clean, sanitary condition? There is only one way to inform them: shout the information from the house tops.

Now let me hear from someone who is going to say we are not in the cigarette or cigar business. We are in a profession, a big profession. Certainly we are. That is why a lot of the men in this big profession cannot pay the rent on the first of the month.

There are a few courses in which dentists enroll, paying a large fee for the benefit of learning how to obtain the largest fee possible from some poor victim. But these courses don't tell you how to get them into the office. There is only one way to get them into your office, that is, advertise. There is a good way to advertise and a bad way. *Let us get the good way,* as Dr. Hutton urges.

Permit me to thank ORAL HYGIENE for the use of its columns. It is the only magazine I know of that permits articles to be discussed pro and con.—H. P. DOMENICONI, D.D.S., *San Francisco, Calif.*

"Deplorable"

Perhaps this letter to you will receive recognition. Pro or con, it has an important subject under consideration.

How many students entering dental school this fall would select dentistry for their course if they had the true business side of dentistry taught them before registering? There might be a few who would still believe in the magic rug.

Teach them that the cost of an expensive five-year course is small, compared with the cost of equipment for an office and the time and money spent waiting (if very fortunate) to build up

a self-supporting practice. Explain that it will be five or ten years after graduation until they will be free of this burden, and that they are gambling with life until they do have their expenses paid. Odds against the initial investment are great. It does not take a Babson to figure out this proposition.

Did not the Federation of Dental Colleges twelve or fifteen years ago have legislatures pass laws eliminating the D. E. F. X. dental colleges and forcing the colleges to comply with the standard of what is known as the A and B grade schools?

This Federation did originate a law to that effect, and with the power invested came the right to increase the number of years necessary to complete a dental education. The course has now reached an astonishing term of five or six years. Was it necessary to do so? Many three-year graduates can compete with the five-year men, and experience proves they are doing splendid work in the profession. Knowledge is power, but to increase that power without remuneration is unscientific and unscrupulous, and eventually meets with opposition.

Logic must be allied with reason. What man can afford to spend five or six years of his life in a dental school and be graduated with a burden of thousands of dollars, and accrued interest, and then compete on prices with a chainstore group of advertisers?

Dentistry is a profession and should be kept a profession. If it is going to join the ranks of a chainstore proposition, then let the chainstore principle reign supreme in colleges and revoke the law passed twelve or fifteen years ago so that the colleges can give the rights and honors to their students in a one- or two-year course. The student by this procedure can, compared with the amount of money invested, realize a very worth while return on his initial investment.

Would the dental colleges permit such a wholesale delivery of diplomas? No! The Federation twelve or fifteen years ago ruled out that principle by legislation. Why? Too many tangents of personal gain are attached to this principle to enumerate. The law of self-preservation entered strongly into their desire to protect the rights of education and their executives.

Then, why cannot such a principle be used to protect the student and practitioner of the future against the development of a force of destruction in our profession?

It is true that no one has the power or right to state what another man's service is worth. That is wholly within the individual. Relating to dentistry, the only method of determination would be to sum up the hours of lost earning power during the school course, plus the actual expense of the course and the equipment of the office. With these expenses computed, the young dentist is ready to

start his career. Don't be astonished. There is space in the Hall of Fame for the marvel who accomplishes this opening feat.

It is indeed a disgrace to the intelligence of the profession to know from experience the above facts and then deliberately continue to pay good money for education and equipment and to be subjected to the humiliation of a chainstore principle. We are a profession and should revise and bring our status up to par or to the equal basis upon which we were forced to pay for our rights.

Does the medical profession tolerate the insolence of members possessing the rights and honors bestowed upon them by the faculty of an A grade medical school, the right to perform tonsilectomies at a rate of one tonsil for three dollars—two for five dollars? Or do they permit the advertising of an appendix operation for twelve dollars, a guarantee in obstetrics, complete for seven-fifty? Ridiculous, is the outcry. Why must the dental profession tolerate such deplorable practices? I ask the profession.—G. J. BRETT, D.D.S., *Lancaster, Pa.*

A Protest

In the November issue of ORAL HYGIENE* Diagnostician uses some data concerning Dean Owre of Columbia University which requires some amplification.

His reference to the rating of the Columbia School of Dental and Oral Surgery as coming from the "U. S. Department of Interior, Office of Education, Circular No. 33 on Dentistry (Walter J. Greenleaf)" is not entirely correct. This circular quotes the report of the Dental Educational Council. It is, therefore, not entirely fair to create the impression that the rating was officially made by the U. S. Department of Interior, Office of Education.

Incidentally, this rating was made by the Dental Educational Council in 1926, shortly after Columbia University had taken over the commercial Dental School with the legal responsibility of the hundreds of students who were part of the institution. Dean Owre assumed the reins in July, 1927, one year before the Dental School was housed in its new quarters at the Medical Center. It is difficult to understand, under the circumstances, how Diagnostician can hold Dean Owre responsible for the educational program of the 1928 graduates.

The Dental Educational Council has been requested on more than one occasion that they record their rating of the Columbia School of Dental and Oral Surgery as based upon their investigation of 1926. This they have consistently refused to do, thus giving the impression that the rating is of recent date.—M. DIAMOND, D.D.S., *New York, N. Y.*

*ORAL HYGIENE, November, 1931, p. 2401.

The RESTORATION *of* ALVEOLAR BONE *following Periodontal Erosion*

By W. F. LAWRENZ, D.D.S.

UNTIL comparatively recent times, the view has prevailed in the dental profession that alveolar bone is lost forever once it has been destroyed by periodontal erosion. The person so unfortunate as to suffer any destruction of nature's periodontal framework was regarded as, by so much, a person maimed. His loss of alveolar bone fabric was accepted as a finality.

But, in the second decade of our century, after persistent scrutiny of the phenomena that follow complete removal of necrotic débris by instrumentation, in cases broadly-termed *pyorrhea alveolaris,* several workers observed that, under favoring circumstances, nature may replace eroded bone substance to a measurable extent.

True, the amount of such bone replacement was not all that could be desired. It was but little, even at the most. But, though relatively little in quantity, it was sufficient to be observable, and was actually measurable. And, however small it was in point of mass, any demonstrable amount of bone replacement was, in point of scientific import, very great.

Once the replacement of alveolar bone became a proven actuality, the effort of workers

was directed to the task of finding some means whereby the newly discovered healing power of nature, this new-found *vis conservatrix naturae,* might be increased in energy, accelerated in action, and furthered in effect.

Most fortunate, indeed, at this particular juncture was the spread of ultra-violet radiation over the landscape of the scientific world. One of the effects of its dissemination was that, coincidentally, on both sides of the Atlantic, the attention of clinicians was attracted to the function of ultra-violet rays in the calcium-phosphorus economy of the metabolism of vertebrates.

Since then a vast deal of experimentation has been carried on in an endeavor to sytematize the application of ultra-violet energies to the task of eroded alveolar bone replacement. Here and there indubitable successes in relatively large number have been achieved. But treatment formulae of the successes achieved failed generally to duplicate effects initially attributed to them. By reason of geometrical and physical handicaps inherent in all ultra-violet light sources available until very recently, all serious attempts to develop dependable formulae for ultra-violet treatment resulted in repeated disappointments.

Because of continual variation in essential factors—variation in the angle of incidence of radiation; variation in the energies of one lamp as compared with the energies of another of the same make and model; variations in the energy discharge of a lamp today compared with its energy discharge of yesterday, as a result of constant and rapid deterioration of super-heated quartz; variation in energy discharge of a given lamp, due to fluctuating absorption by the metallic contents of the burner —because of these variations, dosage determination was long beset with disheartening difficulties.

Within the last two years, however, the problem of dosage has been simplified by the production of an ultra-violet energy source from whose radiations have been eliminated the factors of variation referred to. And though we are not yet able to say, in mathematical terms, what may be the utmost limit of achievement to be realized in the replacement of eroded periodontal bone by the agency of ultra-violet radiation, we believe that data already accumulated are conclusive enough to constitute the materials for an intelligent opinion as to what can, and what cannot, generally speaking, be hoped for with such agencies as are available at the present stage of our knowledge.

What then can be hoped for today in any undertaking to replace alveolar bone fabric destroyed by action of so-called pyorrhea alveolaris?

Several contingencies are involved in any appropriate answer to this question:

First, we have to consider the extent of the bone destruction in the case. Obviously, the greater

the loss, the smaller, relatively, may be the proportion of bone replaced.

Second, we have to consider the structural deficiencies that characterized the alveolar fabric in the case at the outset of disease.

That structural deficiencies in alveolar bone are always antecedent to periodontal erosion might seem, at first blush, to be too sweeping an implication. It is not too sweeping. On the contrary it may be laid down as a rule that, wherever the disease commonly called pyorrhea alveolaris appears, deficiency in alveolar bone structure may be observed as an attendant circumstance. It seems obvious that some relationship of cause and effect exists between the physiological deficiency and the disease. That such disease may be, naturally, the outcome of an alveolar fabric structurally inadequate to withstand the stress imposed upon it by use can hardly be disputed.

So we may say that periodontitis has a certain definite physiologic background. This background, to a greater or lesser extent, is made up of large bell-shaped teeth with deep interlocking cusps superimposed on short, slender roots, supported by thin alveolar walls, flanked by deep gingival crevices.

It may be worth while, at this point, to note that pyorrhea alveolaris seems largely to be a disease of mixed-breeds as distinguished from pure-bred races. The disorder is rare among pure-bred dolichocephalic types, and likewise rare among pure-bred types that are brachycephalic. But the cross-breeding of long-headed individuals with broad-headed individuals has produced an offspring in which periodontal disease abounds. The dental inheritance of such progeny is seen to be an inharmonious assembling of anatomical parts. The parts are heterogeneous and poorly put together. When, to natural stress, are added the effects of dietary errors, ultimate break-down may be regarded as a natural sequel to such inferior genesial workmanship.

There is a further consideration:

Third, the skeletal and metabolic condition of the individual. Periodontal erosion, in one way or another, to some extent, seems to be a consequence of calcium-phosphorus deficiency. The disease prevails among "sun-dodging," as distinguished from sun-dwelling, peoples. The paleopathologist finds periodontal erosion in human remains of the most ancient civilizations. But it is yet to be recorded that he has ever found the first evidence of such a disease in a Cro-Magnon, or a Neanderthal, jaw.

Although I am not, at this time, prepared to present any data in support of my view, I will say that my observation of the metabolic phenomena of the cases of periodontal erosion that I have seen, and treated, convinces me it is more than a coincidence that the spread of this disease in our own time runs

parallel with the ratio of increase in urban indoor population as compared with rural outdoor population. I am prepared to state it is my opinion that we have, in this phenomenon of ratios just referred to, a clear evidence of ultra-violet starvation on the part of civilized peoples. We have, it seems to me, back of the present-day manifestation and spread of periodontitis, a calcium-phosphorus inadequacy that should, to some extent, be dealt with as a phase of rickets.

What then, after having given due value to the foregoing considerations, are we, in any case, to hope for as we enter upon the task of restoring eroded alveolar bone?

Assuming that we employ a fair degree of technical skill in removing débris, and a fair degree of mechanical acumen in coping with structural abnormalities incident in a typical advanced case of bone erosion adjacent to teeth that can be maintained in place, we may hope to restore a minor fraction of the mass that has been destroyed. The maximum replacement may be effected within the interval of one year's time, and may amount to as much as 25 per cent of the mass destroyed by the necrosis.

The agencies employed are of two sorts: mechanical and photochemical.

For the reason that an abundant literature already exists on the subject of mechanical intervention in such cases, I shall pass over the subject of mechanical agencies in order that I may deal, in greater detail, with the matter of photochemical agency.

In order to secure the maximum recalcification, the first essential is, in my judgment, an ultra-violet energy source possessed of the following physical characteristics:

(a) A relatively high intensity of energy in the frequencies effective in activation, as shown by the recent work of Smakula, Sonne and Reckling, Marshall and Knudson, and others.

(b) Energies relatively free from the red of the visible spectrum. Red has the effect of nullifying the activating energies of ultra-violet radiation, as shown by the recent work of Windaus, Ludwig and von Ries, and others.

(c) Energies relatively free from the pigment-provoking frequencies between 3000 A and 3150 A of the ultra-violet spectrum. Pigment prevents penetration of photochemical energies and is, for our purposes, a thing to be avoided.

Besides possessing the physical characteristics described, the lamp for local irradiation should be so constructed as to provide for the delivery of ultra-violet rays at right angles to any surface of the oral cavity.

In addition to such a lamp as that described for local irradiation, there is a second photochemical prerequisite essential, if maximum restoration of al-

veolar bone is regularly to be effected. This second prerequisite is a lamp for ultra-violet irradiation of the entire body. The spectral characteristics of the whole-body irradiation lamp should be identical with those of the lamp for local irradiation already described. But the lamp for body irradiation should differ from the oral irradiation lamp in size, and in geometrical design. It should be so constructed as to present a relatively broad source of irradiation. And it should be motile so that it may readily be passed over the entire body area at a uniform distance, thus making it possible to administer a large quantity of energy evenly distributed over the whole body without anywhere working injury to the skin, and making it possible, also, to deliver in terms of time, energy density, and rate of movement of the lamp, a dosage, relatively accurate, of parallel-ray, ultra-violet radiation.

Any undertaking to irradiate with ultra-violet energy a large oval surface, like that of the body, by means of a point-shaped or line-shaped source of radiation, operated in a fixed position, must result either in under-irradiating, or in burning the skin. The one effect or the other is inevitable. And any attempt at dosage through such agency becomes, at one and the same time, a speculative adventure in therapeutics, and a vacation in arithmetic.

Why should a dentist in the practice of periodontia irradiate the whole human body with ultra-violet energy?

My answer is: He should do so for the reason that, unless the body receives a certain quantity of the essential chemical products of ultra-violet irradiation, conditions of disorder will prevail through the body organism in its processes of repair as follows:

(a) The vegetative system will not empower the circulatory system to absorb from ingested food elements the calcium and phosphorus requisite for the needs of the skeleton.

(b) The blood stream will not be able to maintain in solution, and deliver to the cells of the organism, the proportion of calcium and phosphorus requisite to their processes of repair.

(c) Because the blood stream is unable to dissolve and maintain in solution the requisite proportion of calcium and phosphorus, abnormalities will prevail in the chemistry of bones and teeth.

Otherwise, force feeding with organic minerals does no good in such cases. It is one thing to get the minerals into the intestinal tract. It is quite another thing to get them from the alimentary canal into the blood stream. And it is yet another thing to keep them there.

A decade has now elapsed since, in my first reaction to the early achievements of Rollier, I was prompted to experiment

with the activating energies of our superlative California sunlight. I selected a wretchedly involved case of periodontal erosion, displaying an extended area, and having one pyorrhea pocket between five and six millimeters in depth.

Having curretted away all necrotic matter, both hard and soft, I corrected incident malocclusion. Then I constructed a cheek and lip retractor, fastened it over the head of my patient, posed the patient, and exposed the diseased segment to the midday sun. Except for a few cloudy days, the exposure was daily repeated for four months. No replacement of bone was observable at the end of that period of time. But there was observable a distinct improvement in the condition of the soft tissues of the involved area. They had taken on a normal appearance, typical even as to stippling. Under firm pressure of the gums there was no discomfort, and no extrusion of fluid.

At the end of a full year, however, on close comparison of roentgen films, there was noticeable a slight marginal line of new alveolar bone. I was much encouraged and decided then and there to proceed with the latent experiments I had formerly been conducting in artificial restoration.

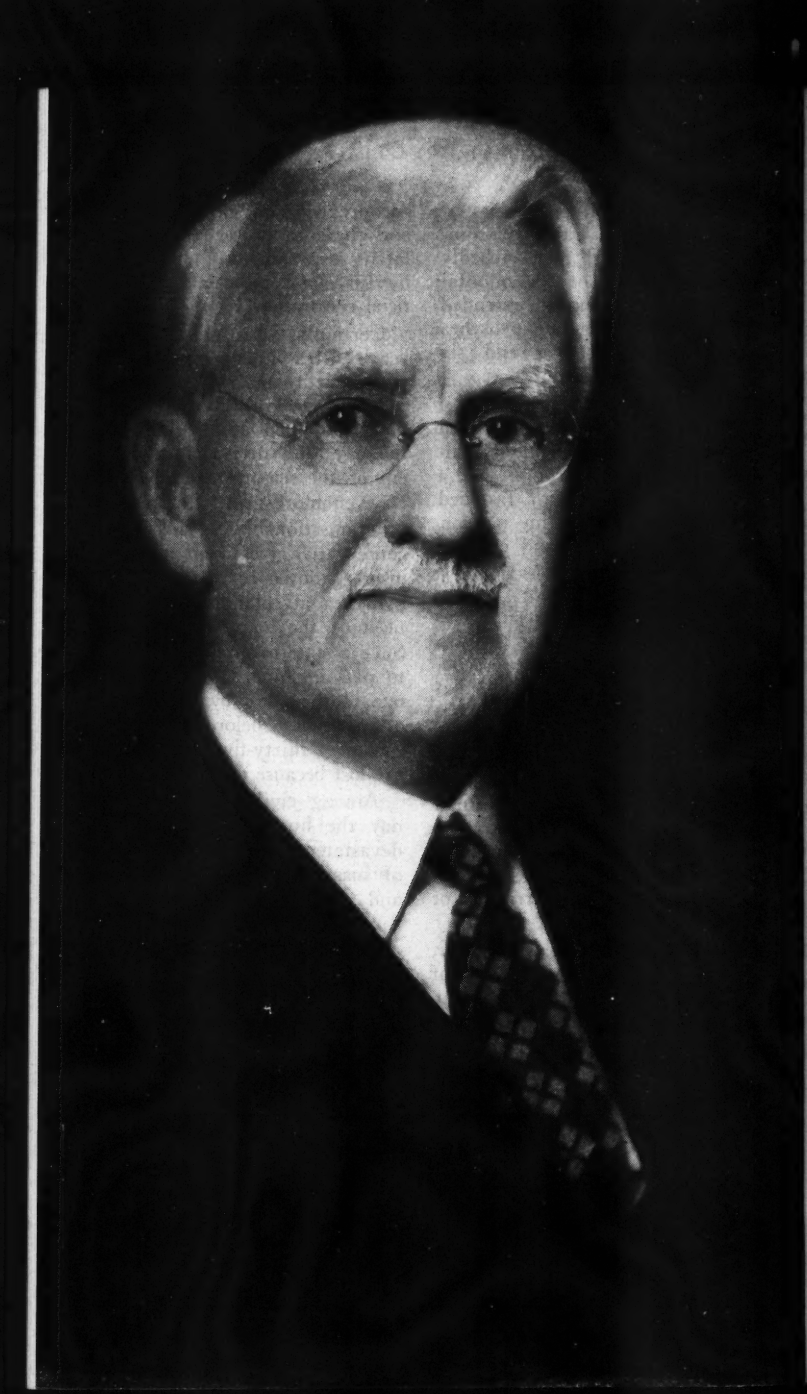
Certainly, I reasoned, if one year's ultra-violet periodontitis treatment by natural means had proved successful, then artificial means, applied at all times of the day, and utterly independent of the season, should show an even more gratifying result.

Unquestionably, a successful conservative treatment for the disease known to the public as pyorrhea alveolaris is a crying need of the hour in dentistry. Such a state of affairs has come to pass in America that where one tooth is lost by caries, five or more teeth belonging to persons over thirty-five years of age are lost because of periodontitis.

Among civilized peoples today the human body is being devastated of its natural organs of mastication. Beauty of face and feature is being transformed into wholesale ugliness. And a very great portion of the devastation that is being wrought, and occasioned, by the disease is preventable beyond all question.

Many Thanks

I would be ungrateful indeed if I did not express to you my deep gratitude and a wish for the future success of your very interesting publication. I have been receiving ORAL HYGIENE since May, and have enjoyed every copy a great deal.—JUAN C. GARCIA, D.D.S., *Macabebe, Pampanga, P. I.*



Thomas Lewis Gilmer,

M. D., D. D. S., F. A. C. S., Sc. D.

ONE of America's greatest oral surgeons, Dr. Thomas L. Gilmer, died in Los Angeles at the beginning of the new year. A long, active, useful life has come to an end, so far as this earth is concerned. It is hardly believable that a brain like Dr. Gilmer's vanishes from the universe. The almost certain knowledge that a career of usefulness lies ahead makes the termination of a long and distinguished career an incident rather than a tragedy.

Dr. Gilmer was for many years Professor of Oral Surgery at Northwestern University Dental School, of which he was one of the founders, and at the time of his death was dean emeritus of that famous institution.

The present-day development of surgery of the mouth owes much to the pioneering spirit of Dr. Gilmer. He was one of that great Chicago group which rendered such splendid service to dental education in the later years of the last century and in the earlier years of the present century.

As a teacher of oral surgery and pathology he had no superior, and the success of his students in practice must have been to him a source of gratification.

So passes a man of unusual achievement. We revere his memory, we admire his ability, we regret the loss of his friendship and counsel, and we are confident that his future will be more brilliant than his past. —*R.P.M.*

W. LINFORD SMITH
Founder

ORAL HYGIENE

REA PROCTOR McGEE, D.D.S., M.D.,
Editor

Manuscripts and letters to the Editor should be addressed to the Publication Office at 1117 Wolfendale Street, Pittsburgh, Penna.

The First Ballot on Reciprocity

WHEN some of our older men were young there was a very famous American statesman named Blaine who proposed the plan of Reciprocity in the application of our then infant but rising tariff barrier. Senator Blaine's plan was simple and effective and was soundly based upon the mutual satisfaction of "You scratch my back and I will scratch yours."

Reciprocity is the *exchange of courtesies.*

Free trade is the absence of any barrier.

In the November, 1931, issue of ORAL HYGIENE there appeared a ballot for voting upon the principle of "National Licensing." No mention was made as to whether the licenses should be "reciprocal" or "free." The general idea of a national license received an overwhelming affirmative vote, the negative was remarkably small. To date the vote is as follows:

I Believe in the Principle of National Licensing: 1355
I Am Opposed to the Principle of National Licensing: 32
Total: 1387

This subject has been much discussed, always with the hope that there are fewer dentists in proportion to the number of patients where we wish to go than

Editorial Comment

where we leave. As a matter of fact dentists are fairly well distributed and reciprocity is not likely to increase the percentage of competent dentists in the country districts. In fact, the expense of a dental education is so great that the modern graduate sticks to the town as the only place where there is enough practice for him to keep up with his obligations.

On the other hand, the mere fact that a dentist must register in every state and territory in the United States should not operate to deprive him of the right to practice his profession wherever the flag flies, provided he does not make a specialty of stepping into a community and out again before his work overtakes him. There is no doubt that some better method of licensing should be adopted.

If the National Board of Dental Examiners can get the consent of all of the states it is quite likely that the dental movements can be so regulated as not to overwhelm one community and produce a dental famine in another area.

The best way to handle the proposition of numbers is to regulate the number of students to be accepted by the colleges. If the raw material is not taken in, there will not be a surplus of the finished product. Whether or not reciprocity is ever adopted there should be a limit placed upon college admissions.

This is the case not only in dentistry, but in all scholastic institutions of college standing. Many ordinary minds are being ruined by the attempt to cram into them a lot of information that does not rest comfortably in a limited space.

As citizens of the U. S. A. we all pay our income taxes with the usual and normal complaints and we do our military duty when the time comes and we listen to the scofflaws and the reformers and to the

supermen who tell us just how to catch Prosperity, but we are expected to stay in one place, unless we change our occupation. The only way in which anything can be done to actually achieve reciprocity is by long and arduous effort and of course, a good plan.

The best method is to so limit the production of graduates that the states themselves will demand reciprocity.

This vote is a very interesting expression upon this question. One of the peculiar angles to this reciprocity matter, that I have been writing about for so many years, is that the men who were not interested last year or this year will be deadly interested next year when they wish to change locations.

This is a good time for discussion because nobody can move anyway; you can't walk and carry much dental equipment.

The Presence of Prosperity

A MICROSCOPIC diagnosis of pathogenic activity allows us to predict with more than reasonable accuracy certain well defined courses of hard luck for the patient. Why not work the other way and, by a careful study of the finer points of well being, realize that there is a lot of good in store for us in the immediate future?

One of the big things that the recent depression did for us was to put a lot of incompetents out of business. Of course, some of the competent people were carried down a few flights, but they will soon come up again.

If we have learned to conduct our affairs with practical common sense, the expensive experience will have been worth while.

No one knows better than the dentist just what the more intelligent people are thinking about. It is about time for the dentist to take a greater interest in politics and to take numerous seats in the various state legislatures and in the Congress of the United States

as well as in the U. S. Senate. Our one representative in the Senate has been such an outstanding success that we should have more men with a similar training in the law making bodies.

In local affairs the dentists should step in and grab off the offices so that the people may discover what a good system of government we really have. Up to now the lawyers have had more than their legitimate opportunities and they have made a sad mess of it.

The outlook for dentistry is good; better than the outlook for any other profession. Let us supply a lot of the good judgment that has been so lacking in the world in the last two years.

The Boy Scouts

AS the dusk settled over London one beautiful evening in May in the fateful year of nineteen hundred and eighteen, the Maroons, which were the signal guns stationed along the river Thames, began booming. Away off at the mouth of the Thames the first faint sounds warned London that "Heinie" was up with his bombers.

After crossing the Channel, the Germans always followed the river up to the British Capital. The Maroons were stationed a mile apart and as the hostile planes came up, their speed could be accurately measured by timing the guns.

In London the Boy Scouts, who were not otherwise engaged, were formed into companies for Military Police detail. When the deep booming of the cannon along the river began, the Scouts ran to their appointed Police Stations and from those central points the little fellows, with their bugles sounding the "Take cover," marched down both sides of the streets and saw to it that every person not in uniform took shelter in the appointed *abri*. After the attack was over the citizens had to stay under cover until

the Boy Scouts again patrolled the district, sounding upon their bugles the "All clear."

On this particular night the attack was so swift that the German bombs were falling by the time the Boy Scout's Patrol was started. Down the street they went in perfect formation. The air overhead seemed to swarm with hostile planes and the defending British fighters. From all sides came the deafening roar of the anti-aircraft cannon that threw a barrage of steel shells two miles high. On marched the Boy Scouts, sending the wildly excited people to safety.

Exploding bombs added to the furor, and now and then the British defense would bring down one of the giant German bombers with his whole load of high explosive. When the planes came down the bombs came with them; the destruction in the city was terrific; one plane fell upon the roof of a curio store in King William street and distributed curios all over the southern counties.

During this intensive air fight, the Boy Scouts aided in the care of the wounded and helped to clear away the dead. Then, when the remnant of the German Air Squadron hurried home, the Boy Scouts marched up and down the streets again sounding the "All clear."

During every air attack these little fellows were on duty, performing their work with the *élan* of the best trained soldiers and thus releasing the grown men for duty in the field.

In the hospitals the Boy Scouts were a never-ending source of satisfactory aid as messengers, guides, escorts for ambulant wounded, and often as auxiliary ambulance corps men. In every country the Boy Scouts have performed their duties faithfully and fearlessly.

In time of peace, the training of these boys in the Scout service is one of the few bright spots in the outlook for the future of American institutions.

It is a very pleasant circumstance that, among the thousands of young criminals apprehended in this country in recent years, there were no Boy Scouts.

If you have boys of your own of Scout age, do not neglect the very important duty of enrolling them in the nearest Scout Troop, and then take a personal interest in the Scout welfare.

Since the moral welfare of the public has been placed in the hands of the Government, there seems to have been a great deterioration in the quality of some of our recent adolescents. The Boy Scout training has produced satisfactory results; get your boy started right before the gang gets him.

Read over the oath and the Scout law and see if you do not think that this movement is of the greatest importance now:

THE SCOUT OATH

On my honor I will do my best.

1. To do my duty to God and my country, and to obey the Scout law;

2. To help other people at all times;

3. To keep myself physically strong, mentally awake and morally straight.

THE SCOUT LAW

1. A Scout is trustworthy. A Scout's honor is to be trusted. If he were to violate his honor by telling a lie, or by cheating, or by not doing exactly a given task, when trusted on his honor, he may be directed to hand over his Scout badge.

2. A Scout is loyal. He is loyal to all to whom loyalty is due: his Scout leader, his home, and parents and country.

3. A Scout is helpful. He must be prepared at any time to save life, help injured persons, and share the home duties. *He must do at least one good turn to somebody every day.*

4. A Scout is friendly. He is a friend to all and a brother to every other Scout.

5. A Scout is courteous. He is polite to all, especially to women, children, old people, and the weak and helpless. *He must not take pay for being helpful or courteous.*

6. A Scout is kind. He is a friend to animals. He will not kill nor hurt any living creature needlessly, but will strive to save and protect all harmless life.

7. A Scout is obedient. He obeys his parents, Scoutmaster, patrol leader, and all other duly constituted authorities.

8. A Scout is cheerful. He smiles whenever he can. His obedience to orders is prompt and cheery. He never shirks nor grumbles at hardships.

9. A Scout is thrifty. He does not wantonly destroy property. He works faithfully, wastes nothing and makes the best use of his opportunities. He saves his money so that he may pay his own way, be generous to those in need, and helpful to worthy objects. *He may work for pay but must not receive tips for courtesies or good turns.*

10. A Scout is brave. He has the courage to face danger in spite of fear and to stand up for the right against the coaxings of friends or the jeers or threats of enemies, and defeat does not down him.

11. A Scout is clean. He keeps clean in body, and thought, stands for clean speech, clean sport, clean habits, and travels with a clean crowd.

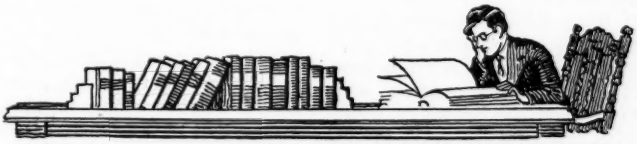
12. A Scout is reverent. He is reverent toward God. He is faithful in his religious duties and respects the conviction of others in matters of custom and religion.

The percentage of dead-beats, crooks, bums, and scalawags in this country is too great, and the percentage of decent, honest, capable, dependable, industrious, patriotic, able citizens is much smaller than it should be. The Boy Scout Troops will increase the percentage of good citizens.

"National Licensing" Analysis

The complete analysis of the vote on national licensing, promised for this issue, will appear in the March number. The topic is treated editorially in this issue.

ORAL HYGIENE'S LIBRARY TABLE



BOOKS REVIEWED FOR BUSY READERS

Toothsome Topics*

By CLARENCE O. SIMPSON, M.D., D.D.S., F.A.C.D.

Professor of Radiodontia in the Washington University School of Dentistry; Director of the Oral Diagnosis Section of the Soper-Mills Clinic, St. Louis; Author of *The Technic of Oral Radiography* and *Advanced Radiodontic Interpretation.*

Education of the public to the importance and advantages of health dentistry and the personal care of the mouth has been one of the tasks to which many of our conscientious dental leaders have given considerable time, effort, and thought. This crusading has been carried on by personal supervision in the public schools and clinics, by educational lectures before interested groups, over the radio, and by instructive, ethical articles in newspapers, magazines, and in books.

Clarence O. Simpson has for many years been one of the outstanding men in dental circles and every dentist is familiar with his contributions to radiodontia. Now we find him in the rôle of lay educator by virtue of a most interesting book he has just authored on health dentistry.

Toothsome Topics, Dr. Simpson's new book, is intended primarily for the dentist's reception room table. It contains articles that will be interesting and helpful to every patient, and it is not unreasonable to think that the perusal of this book prior to entrance into the operating room will aid greatly in putting the patient in a more appreciative and receptive mood for dental service.

This little book is divided into twenty-four chapters and each one of them discusses some phase of dentistry or oral health that has at some time or another come into the mind of every patient. The author handles his subject adeptly. Many comparisons and word pictures tell the story in a manner not soon forgotten. He has a very fine sense of humor which helps to relieve the tension of a book of this

*The University Press, St. Louis, Mo.

kind and frees the patient's mind of any suspicion that he is being sold on dentistry.

As an example of the wide range of subjects covered by this book we will mention a few of those that very often frame themselves into questions in the minds of patients. He tells how to brush the teeth properly, why to preserve the deciduous teeth, what type of tooth brush to use, how vacations affect teeth, why x-ray pictures are important, why orthodontia is necessary, and how to judge dentists. There is an amusing but instructive chapter on chewing gum, and dozens of other intimate subjects are handled in a delightful manner.

This is one of the finest books of this type your reviewer has ever read and it is earnestly suggested that every dentist place one on his reception room table. Dental magazines have no place in the reception room, and if you feel that your patients must read about dentistry in your office, hand them this clever little book which was written for that purpose.—*T.N.C.*

Who Owns Your X-Ray Picture?

The question whether the roentgenograms of a hospital patient belong to the patient or to the hospital was answered by a court for the first time, so far as is known, in Hurley Hospital vs. Gage, decided on appeal, April 21, by the circuit court for the county of Genesee, Michigan.

The patient had been roentgenographed in the roentgenographic department of the Hurley Hospital at Flint. The usual charge for the service was included in the patient's bill. He made a payment on account, but refused to pay the charge for roentgenographic service unless the roentgenograms were delivered to him.

The hospital refused to deliver them and sued the patient for the balance due. In the justice's court where the suit was instituted, judgment was given against the hospital. The hospital, however, because of the principle involved, appealed to the circuit court of Genesee County.

At the hearing on the appeal, no one appeared on behalf of the patient, and the case was heard and judgment rendered without the submission of evidence or argument by him.

In giving judgment, the court pointed out that the hospital sold and patients paid for, not the material that went into roentgenograms, but knowledge and experience. The protection of the hospital might depend largely on the proper preservation of the roentgenograms and, said the court, the films should remain with the hospital.

Judgment was given against the patient for the balance due on his bill, covering the amount charged by the hospital for the roentgenograms.—*A.M.A. Journal*

(A New Colyum)

PEAKS

and

By FRANK A. DUNN, D.D.S.

POKES

Your job should be a genial friend,
A comrade good and true,
The kind on whom you can depend,
Who can depend on you,
To whom by pleasant ties you're bound
And always glad to have around.

PIPE smokers are just naturally men of wisdom, honor and virtue, devoted to their wives, and friendly to their neighbors. Picture a villain in a movie putting down his pipe while he creeps up with a club to sock his enemy on the head; or picture a foul wretch lighting his pipe as he mockingly laughs at the trusting girl he has toyed with and spurned.

Why, you simply can't picture it! Fortunate is the wife with a pipe-smoking husband.

("Ha! Ha!" gloats every member of that great fraternity, the Noble Brotherhood of Pipe-smokers, "there's a truth as sweet as the old briar itself. The good wife must certainly get an eyeful of this.")

"Banquet is a good enough word in its place," according to Ambrose Bierce in his *Write It Right,* "but its place is the dictionary. Say, dinner."

ORAL OUTLAWS: Alias, ague, attaché, awry, impotent, heinous, harass, Nobel, respite, acclimate, column, bade, grimace, mustache, vagary, orgy, curator, bestial, automaton, often, rabies as they are frequently pronounced. Each of these words has only one pronunciation, and it may not be yours. (Bet you five dollars you don't pronounce half of them correctly.)

"Is it raining outside?" one dentist asked another, who answered, "Where in hell else would it be raining?"

A wise-cracking and long-suffering brother is opposed to the kind of club that is being organized in some dental societies to develop more speakers who can take the floor at meetings and talk.

He is enthusiastically in favor of a club, but another kind of club, say about two inches thick and two feet long, to stop them.

Ask ORAL HYGIENE

CONDUCTED BY
V. CLYDE SMEDLEY, D.D.S., AND
GEORGE R. WARNER, M.D., D.D.S.,
1206 REPUBLIC BLDG.,
DENVER, COLO.

Please communicate directly with the Department Editors. Please enclose postage. Questions and answers of general interest will be published.

Local Anesthetic Aid

In the November issue of ORAL HYGIENE,* Dr. H.G.H. writes telling you of an experience where a local injection plus two mandibular injections failed to give good results in anesthesia in the lower anterior region of the mandible.

The above experience is not an unusual one. It is possible to make a perfect lower local injection, or a mandibular, and still have the patient complaining of sensation.

If Dr. H.G.H. again has such an experience I would advise that he place his index finger on the lingual of the mandible opposite the mental foramen and inject here four or five minums of the anesthetic solution. This will often solve the problem, for here it is that a small foramen is occasionally present, transmitting a small branch from the cervical plexus.—L.R.S.

*ORAL HYGIENE, November, 1931, p. 2408.

Bonuses for Assistants

Q.—I have read several articles in ORAL HYGIENE relative to giving secretaries and assistants bonuses for certain things they do. Will you kindly tell me how this is done and what they are given for?—J.H.B.

A.—While we have had no experience in giving secretaries and assistants bonuses, it is my understanding that they are given for excellence of service as demonstrated by increase in cash income. One is normally entitled to ten per cent annual increase in one's income and if there is any increase beyond

that, it may be assumed that the secretary or assistant should share in that increase as both are helping to bring it about. The amount would be entirely up to you. Some men who have tried this plan are very enthusiastic about it.—G. R. WARNER

A Case for the Repairman

Q.—I am having a little trouble with my dental chair, a hydraulic chair of standard make. When it is elevated it has a tendency to leak down at regular intervals until it is about half way down. Could it be that it needs more oil? I have not added any for several years.—R.C.M.

A.—Your chair needs a new plunger packing. Just adding more oil will do no good.—V. C. SMEDLEY

Denture Sore-Mouth

Q.—I am most anxious about a patient for whom I made a full upper denture some time ago.

The first plate was of rubber. She wore it a few months and then her mouth became inflammed, a condition seen once in a while under vulcanite dentures. I made the case over, using a different rubber, but the results were the same. Now she is wearing a condensite plate and the same thing has happened. Milk of magnesia will relieve the condition for a short time only. What do you suggest?—L.S.

A.—I am convinced that black rubber is the least apt of the non-conductive plastic base materials to irritate a sensitive mouth. I would like to see you try a pure silver base plate in this mouth, as I believe it will correct the condition. I have used this type in a few cases and it seems satisfactory.—V. C. SMEDLEY

Infected Open Antrum

Q.—I have a patient with an opening in the antrum which resulted from the extraction of a six-year molar. For two weeks the patient made good progress. However, she caught cold after washing her hair and pus appeared. There is no swelling and very little pain, and good drainage is obtained by washing out the antrum, but it fills up over night. What treatment do you suggest I follow?—E.M.H.

A.—I would suggest that you continue to wash this antrum every day with a good antiseptic in non-irritating strength until drainage ceases. Then freshen the surface around the orifice and shift a gum flap from the palate over the orifice and suture in place.

It is well in such cases to make a little vulcanite saddle or splint to be attached to the adjoining teeth and worn over the perforation to exclude food or other infectious débris from entering the antrum from the mouth. This might have pre-

vented the infection and it may aid materially in clearing it up promptly.—V. C. SMEDLEY

How the Dental Laboratory Rebases

In September ORAL HYGIENE Dr. R. R. Campbell* comments on the June article by Dr. K. F. Mitchel† on rebasing upper dentures.

Having failed to read Dr. Mitchel's article I am unable to compare his method with that of Dr. Campbell with respect to the means employed by the former to maintain correct occlusion. But would either be interested in knowing how a laboratory technician would go about it?

Presuming that the rebasing impression was taken under pressure and with all teeth in correct, centric occlusion, the first step, after making a stone cast, is to place a disc of soft plaster upon a slab, level it off, and sink the occlusal surfaces of the teeth into the plaster just sufficiently deep to form their imprint. This plaster disc, still fastened to the teeth and with the cast still undisturbed in the denture, is mounted into a plain line articulator. The set screw is tightened and the denture is then worked loose from the cast, the impression material removed from the denture and cast, and the entire palate of the denture cut away. The balance of the tissue side of the denture is roughened with sharp burs, the denture is carried back to the articulator and the teeth set into the imprints in the lower plaster disc. The articulator is closed and the periphery of the denture sealed to the cast with sticky wax. Then the articulator is opened, the lingual portion of the denture sealed to the cast, and palatal waxing is completed. The denture is then invested as for a new case, drawing the denture itself over into the female part of the flask and packing as usual.

If one makes certain that the screws of the articulator are tightened so that there is no movement, and the denture is seated accurately into the imprints in the plaster disc, there is no danger of losing the relationship, nor of malocclusion in the rebased denture. Moreover, while cutting away the palate of the denture, one may also cut away all base rubber even over the last molar and the rebased denture will show no discoloration of rubbers.—B.J.S.

*ORAL HYGIENE, September, 1931.
†ORAL HYGIENE, June, 1931.

Sensitive Gingival Areas

Q.—What is the best treatment for sensitive areas around the gingiva without discoloring it, where the gum has receded? I have been using an eight per cent solution of zinc chloride.—G.L.D.

A.—Zinc chloride is useful in the treatment of sensitive areas in the cervical regions. Dr. Merritt, of New York, advises the

use of formalin. He applies it by dipping an orange wood stick in formalin, allowing the excess formalin to dry out, or drying it with a blotter. He then rubs the dry area for several minutes with this stick. Done in this manner, the gum is not burned with the formalin and yet the dentin or cementum seems to receive the beneficial effects.—G. R. WARNER

Affected Hearing

Q.—I would appreciate any suggestions relating to the following case:

A woman, 32 years old, came to my office for examination in August, 1930. I found several very loose teeth, due to recession of process, gums very pale, but no pus exuding. Questioning revealed history of an anemic condition for which she had been under a physician's care. I took pictures to ascertain extent of recession and removed those teeth showing the greatest recession, replacing with removable work. I have been treating the remaining teeth about every two weeks since, but cannot seem to prevent deposits and pockets from recurring. Is this a true pyorrhea case or some other trouble due to her general condition? What treatment would you suggest?

Her general health has improved, but her hearing seems affected. Is it possible that the oral condition would affect her hearing?—E.E.C.

A.—It is probable a complete picture of this patient would show that her teeth are quite long, that the bite interlocks closely, that the alveolar bone is very thin and that the calcium content is low. Her history would show that she has taken very good care of her teeth and has brushed them thoroughly, so that in a case of such thin overlying gum tissue, as she probably has, thin alveolar bone and low resistance, there would not be much, if any, pus. It is nevertheless a true type of periodontoclasia because, where there is destruction of the periodontium, it is periodontoclasia and there is no question about there being destruction of the periodontium in this case.

Moreover, due to loss of some teeth, to possibly closely interlocking occlusion, to probably low resistance, and also inherited tendency, you may not be able, with even the best of care, to retain indefinitely the rest of the teeth. However, with good care at your hands and at home, with good replacements and with careful attention to the general health, she may be able to keep the remaining teeth a number of years.

It is quite possible that the hearing is associated with the condition of the mouth. It may be that her bite has collapsed enough so that there is change in the relations of the temporomandibular joint which has been shown in numerous cases to affect the hearing unfavorably. If there is any infection in the mouth from pulpless teeth, of course, this also can affect the hearing.—G. R. WARNER

INTERNATIONAL ORAL HYGIENE

Conducted by CHARLES W. BARTON

Is the Dental Nurse the Dentist's Competitor?

Great Britain—According to the *Dental Record,* the question of dental nurses has recently been the subject of discussion at a meeting of the dental officers group of the B.D.A. Sir Norman Bennett, who opened the discussion, put forward the points of view of the patient, the dentist, and the public who provides the money. He considered that only the competent operator should do the work, though much might be said for the saving of time, charting, and perhaps inspecting on the part of the nurse. As regards keeping the mouth clean there was not much tartar on children's teeth, but such work as cleaning might give the dental nurse an opportunity for the preaching and practice of dental hygiene. On the whole he deprecated any kind of operative work being allocated to the nurse.

Dr. H. C. T. Langdon, of the Board of Education, denied emphatically that there was any risk of the dental nurse becoming an unqualified practitioner. No kind of operative work was being taught to them. He believed that the six months' training given at present would make them better dental attendants than those already employed in the service. It was possible that the services they rendered in assistance at the clinics and in propaganda work would prove to be a real economy. The general opinion was against using these dental nurses for inspection or diagnostic work.

Sir Norman Bennett had said that out of one hundred children inspected, there would be sixty to seventy requiring treatment. Would it be worth while for the sake of the small number of the remaining immune or border-line cases for

the school dentist to occupy his time in inspecting, or would he be occupied more usefully in treatment? Mr. Claremont, referring to his recent visit to America, said that he had received a favorable impression of the work of the dental hygienist in that country, the principal result of which was that the people were made "tooth-minded." He referred to the trial of the recently-trained dental nurses at the Eastman clinic, and hoped the scheme would prove its worth by statistics. He believed the work of these nurses would save a great deal of the dentist's time. After further discussion, the chairman said no decision was necessary, but that the members might bear in mind and formulate definite resolutions at a future meeting.

More Food for Thought

The Committee of the Medical Research Council, engaged in a number of investigations meant to prove or disprove the Mellanby's studies of the essential part played by particular qualities of the diet in the proper development and maintenance of the health of the teeth and jaws, is preparing a third report, according to the *Local Government Journal* as quoted in the *Dental Record*:

> The present investigation was carried out at three residential institutions for children under the Birmingham Poor-Law Authority. These institutions, situated in the neighborhood of Birmingham, accommodate altogether some 835 children, aged from 2½ to 16 years, living under the system of cottage homes, each cottage housing 12 to 25 children. The standard dietary is generally similar in the three institutions, and, judged by all ordinary standards, is of a thoroughly satisfactory character. There is a considerable leakage due to transfer and discharge of children, but it has been found possible to retain under continuous observation approximately 400 children.
>
> The main purpose of the investigation was to test the effect of a supply of fat-soluble vitamins A and D over and above that contained in the standard dietary, on the dental condition, both on teeth during development and on those which had already erupted.
>
> At the inception of the Birmingham investigation it was decided that answers should be sought to two questions:
>
> (a) Can the structure and arrangement of teeth in children be influenced favorably by dietetic measures applied during the period of their development; and, if so, are such teeth less liable to caries?
>
> (b) Can the incidence and rate of progress of caries in teeth already erupted be lessened by the adoption of similar dietetic measures?

To the first question the answer must be delayed until a sufficient period of time has elapsed for the undeveloped teeth in the younger groups of children to have reached the stage at which, in ordinary circumstances, there is an appreciable incidence of caries. In this connection it may be noted that Ainsworth found, among unselected seven-year-old school

children, a caries incidence of 18 per cent in the upper and 28.5 per cent in the lower first permanent molars. It is to the second question only that the work outlined in the present report relates. Do these investigations, carried on for this limited period, supply an answer to this question? Certain facts have been established which may be briefly enumerated.

1. In groups of children, numbering from 65 to 86, living under similar institutional conditions, each group receiving a certain specific addition to the standard dietary, over a period of two years, the progress of caries in the permanent teeth has been significantly retarded in those children receiving an added ration of fat-soluble vitamins as compared with those whose additions consisted of treacle and olive oil respectively; the increase of caries in the vitamin group, whether measured by its incidence or its extent, being approximately one third of that in the other groups.

2. In groups of children, numbering 82 and 79 respectively, living in the same institution under identical conditions, each receiving as an addition to the standard dietary a measured ration of olive oil, to which in the case of one group a solution of vitamin D was added, over a period of one year and a half, the progress of caries in the permanent teeth was also significantly retarded in the vitamin group as compared with the group which received olive oil as the only addition.

3. When allowance is made for the shorter period of the second as compared with the first investigation, a general similarity is observable, in the rate of increase of caries, between the group receiving cod liver oil (vitamins A and D) and that receiving radiostol (vitamin D).

4. There was no significant difference in the rate of increase of caries between the children receiving olive oil and those receiving treacle, in the first investigation.

A Curiosity from India

The *Indian Dental Journal* publishes an interesting report by Dr. B. N. Bhattarcharya, of Benares City, on a supernumerary lower molar distal to the wisdom tooth. The report is not only interesting because of the abnormal fact which it describes, but also as a document concerning the peculiar methods of dental treatment suggested sometimes in far-off India. Interesting also is the quaint style in which Dr. Bhattarcharya breaks into print, so the quotation of the report *in extenso* seems indicated:

> A Hindu widow, verging on 50, consulted me in my surgery on the 13th April last with pain on the region of the upper right wisdom tooth. The mouth cavity was closed by half. On enquiry she gave me the history like this: About 4 years ago she felt pain over that portion of the mouth, which gradually aggra-

vated followed by headache on the same side and considerable swelling extending to the outside. The mouth was completely closed. Some doctor lanced inside and gave some medicine for external application. She became all right within a fortnight for the time being. She had similar several attacks after every 6 or 4 months. From last year the condition became more serious and the trouble began to appear every month lasting for 8 or 10 days. During the intervals she had a slight constant and reflex headache and the mouth would not open more than two fingers. The remedy that was used every time was rubbing a caustic stick (silver nitrate stick) over the painful region inside and this would give her some relief. The last statement was corroborated on examination when I found that a few teeth on that side and the right portion of the tongue were blackened.

However, with all these in my mind I started examination. The wisdom tooth was in the line of other molars and quite firm, though a little pyorrhetic. No abnormality around or in the tooth was found. But with difficulty I could detect a shotty tubercle covered by gum tissues situated posterior to the wisdom tooth. Pressure on this produced a little pain and she at once told me that was the site of her trouble. With the point of my explorer I pricked the elevation a little whereupon I felt the distinct typical touch of the crown of a tooth. Being curious enough I separated the gum tissue over it and to my utter surprise a cusp of a tooth was visible at once. The treatment was quite obvious. As there was considerable pain and inflammation I prescribed medicine that subsided them and on the 3rd day i.e., on the 15th April I extracted the wisdom tooth first and then the accessory tooth under local anesthesia. The tooth was of the size of an upper bicuspid one but with 3 cusps and with one root completely blunt at the apex separated from the wisdom tooth, I had the opportunity to see the patient on the 20th May and found she was doing quite all right.

Liquor Permits

That splendid letter* from Dr. C. T. Betts of Toledo, covers most comprehensively the subject of liquor permits to dentists.

In my twenty-five years of practice it is true that there have been occasions when a resuscitant was required, but something else has always answered the purpose as well or better than alcoholic stimulants. In fact, it seems to me that a dentist has about as much professional use for intoxicants as a flea has for a dress suit. Having seen trained fleas thus attired, I could not see that their efficiency was increased.

It looks very much as if the permit for whiskey was for social purposes only. One might ask why dentists should be a privileged class in this respect. Another question: was this permit sought with the knowledge and approval of the A. D. A.? If so, why? Who did it, anyway? For one, I might say that about the first knowledge I had of it was when distilleries solicited orders from me for whiskey. — JOHN H. GILL, D.D.S., *Chicago, Ill.*

*ORAL HYGIENE, July, 1931, p. 1509.

Sixty Years of Dentistry

Some unique experiences in the life of S. C. G. Watkins, D.D.S., of Montclair, N. J., during sixty years of practice.

SIXTY consecutive years in the practice of dentistry is the unique record of S. C. G. Watkins, D.D.S., of Montclair, New Jersey.

In 1871, when eighteen years of age, Dr. Watkins began the practice of dentistry. In the early days there were very few dental colleges, so he began studying under a preceptor, a dentist of some note who had a large practice in Boston.

The following are some of Dr. Watkins' early experiences, as told by him: "I made arrangements with this dentist to come to his office the next day at eleven o'clock and pay him one hundred dollars in cash, to board myself, and work for nothing for six months. At the end of that six-month period he assured me I would be a capable dentist and ready to go out and buck the world.

"At eleven o'clock the next day I started in. The assistant there talked dentistry to me for about an hour and a quarter, and during that time he placed a partial plate in the vulcanizer and started it going, and then went off to his lunch, telling me to watch it.

"I tell you, honestly, that I watched it, but I didn't know much about why I was watching it. After a time the steam began to sizzle; the plug went out of the top of the vulcanizer and the room was filled with steam. I was frightened almost to death, but still I did have enough wit about me to sneak up and turn out the gas. I will not repeat what the assistant said to me when he returned from lunch, but he certainly thought I lacked the sense to make a dentist. After that lesson, I assure you I knew how to take care of a vulcanizer while it was in operation.

"When the plate was vulcanized and taken out, the assistant trimmed and filed it, did some of the sandpapering, and then had me do the rest. Then he gave it to me to polish on the old United States lathe, which stood directly in front of an open window. Before I had been polishing three minutes, the plate was jerked out of my hand, went through the open window, down twelve feet to an iron grating over a cellar win-

dow of the store which was under the office.

"Of course, I was just about as frightened as I was when the valve of the vulcanizer blew out. I went down to the store and got permission to go into the cellar. There I found the plate without a break, just as good as new. I again proceeded to polish it, but took the precaution of shutting the window, before I began. I finally got it finished and had the pleasure, before leaving the office that evening, of seeing it fitted and the client going away very happy. Rather a strenuous day for my first in a dental office.

"I went home to my room that night and during the evening talked with the roomers and told them I was going to be a dentist. One of them immediately said, 'Let me see your hand.'

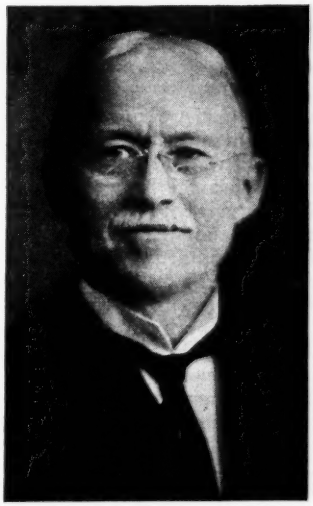
"I held up my hand and she said, 'Oh, you never can be a dentist; your fingers are too short.'

"When I had been working in this office three weeks, I happened to be in the office on a Sunday when a man came along and rang the office bell, and asked if the dentist was in. I said, 'Yes, walk in.'

"He spoke up and said, 'My wife would like to take ether and have a tooth pulled.'

" 'All right, sir. Just step this way,' I answered.

"I showed her into the little operating room and shut the door, as I had seen my preceptor do on several occasions, and proceeded to give her ether and extract her tooth. Fortunately for me, she was not very large or strong, so I was able to manage her. Fortunately, also, the tooth was not a bad one to extract, and I did succeed in removing it, and, very, very fortunately, I did not kill the patient."



S. C. G. Watkins

After serving with this preceptor for several months, Dr. Watkins secured a position with another dentist with whom he gained a large and varied experience. He met with temporary misfortune when, in the great Boston fire of November 9, 1872, he lost everything he possessed in the world.

On January 1, 1873, Dr. Watkins opened an office of his own on Washington Street, in

Boston. Here are some of his experiences, told in his own words:

"I will never forget the end of the first week after I got started in my office. My six dollars rent would be due the next morning and I hadn't a dollar in the world. That evening a man and his wife and sister-in-law came into the office, one of them with the toothache. I succeeded in doing seven dollars' worth of work for one, and a dollar's worth for another, and, what is more, in getting the cash. Imagine the pride I felt the next morning when I walked down to the landlord and handed him six dollars. From that time on my rent was always ready and my bills were always paid promptly.

"There are many interesting experiences I could recite, but I will mention only one more which took place before I took up my practice in Montclair. And that is, my attending the Boston Dental College. I carried on an office practice at the time and attended the lectures. I managed by leaving a little fifteen-year-old Irish girl in the office while I was at lectures, and she would try to make appointments for me and keep people in the office until I would return. I was only two blocks from the college, so the instant a lecture was over I would rush back to the office, and in all probability would find a patient waiting for me. I would extract a tooth, cure an ache, or make an appointment so as to hold the patient, then I would hurry back to the college for the next lecture.

"Once a patient came in, the little girl would not let him out until I came if she could help it. He might complain at the length of time he was kept waiting, but she would say, 'Oh, he must be here any minute,' and she would look out and say, 'Here he comes! Take off your things and be ready!'

"Nine times out of ten she would not have seen me at all, but I would arrive before very long."

Dr. Watkins was graduated from Boston Dental College with the degree of D.D.S. in March, 1875, and two years later he had the pleasure of hearing Dr. I. J. Weatherby, president of the college, say that Dr. Watkins, of New Jersey, was the only man who ever completed a perfect examination at the college.

In June, 1876, Dr. Watkins moved to Montclair, and for many years he enjoyed one of the finest practices in New Jersey. He was always a very enthusiastic member of many dental societies.

In 1880 he was unanimously elected president of the Alumni Association of the Boston Dental College. In the same year he was one of the organizers of the Central Dental Association of Northern New Jersey, of which he was elected president in 1886. He is now the only living charter member of that organization. He was elected president of the New Jersey State Dental Association in

1889, second vice-president of the National Dental Association at Saratoga in 1891, and was re-elected second vice-president at Niagara Falls, in 1892, and again at Chicago, in 1893. He was then elected first vice-president at Old Point Comfort in 1894, and, on account of the sudden illness of the president, Dr. J. Y. Crawford, of Nashville, Tenn., Dr. Watkins became the acting president during the five-day convention held at Asbury Park, in August, 1895.

In 1921 Dr. Watkins was elected president of the Montclair Dental Club and a number of years ago was made an honorary life member of the Southern Dental Association, an honorary life member of the New England or Northwestern Dental Association, a life member of the First District Dental Society of New York, an honorary member of the Central Dental Association of New Jersey, and an honorary member of the Western Essex Dental Association of New Jersey. For many years he has been a member of the consulting dental staff of Mountainside Hospital. The hospital staff, on July 2, 1921, tendered him a testimonial banquet, and at that time presented him with a handsome silver-headed cane bearing the inscription, "S.C.G. Watkins, D.D.S., 1871 and 1921."

While Dr. Watkins was president of the New Jersey State Dental Association, the semi-annual dinner for the officers was held, in January, 1890, at his office and residence, where the first steps were taken by that association to start a movement to create an interest in the profession for holding an International Dental Congress at the time of the World's Fair in Chicago. A resolution was passed at that meeting. A committee was appointed, with Dr. Watkins as its chairman, and was authorized to have circulars printed and sent to the dental organizations in America, asking them to co-operate in the movement. A meeting, at which Dr. Watkins presided, was called and held at the Hoffman House, New York City. After considerable discussion, the matter was referred to the National Dental Association with the request that they take action and organize the first International Dental Congress and work towards its success, which they did.

The first call to be issued read as follows:

"Deeming it fitting and the proper time for holding an international dental congress in the year 1892, the New Jersey State Dental Society has appointed a committee to act in co-operation with like committees from other dental societies throughout the United States. They would request your society to appoint a committee to meet with them at the Hoffman House, New York City, on Tuesday afternoon, April 18, 1890, to formulate plans for the holding of the first international dental congress. Trusting that this will meet with the approval of your so-

ciety, and that your executive committee will appoint delegates at once, Yours very respectfully,————"

The idea was carried out and the International Dental Congress was a great success with twenty-four nations taking an active part.

Dr. Watkins has been the author of many articles published in dental magazines and has invented many dental instruments. He is the inventor of the Watkins toothbrush, the first made with a hump at the end and with the bristles running in rows across the brush, and the entire brush and handle curved. In 1885, he invented the Watkins sectional head-rest for dental chairs, which revolutionized dental head-rests over the entire world, as there has been none other than the sectional head-rest used since that time. He also originated a dental chart and record book for dental operations in 1876.

In 1921 and 1922 he wrote a history of the Central Dental Association of Northern New Jersey, from its organization in 1880 to 1900; and, at a large banquet given in honor of the past president of the C. D. A., a resolution was passed thanking Dr. Watkins for his efforts to perpetuate the past history of the organization.

One of his latest and, Dr. Watkins thinks, his greatest hobbies has been the compiling of seven large looseleaf scrap books containing pictures and obituary notices of practically all dentists in America during the past 100 years. The index to these books is lettered by hand. Three of these books have been placed in the great Dental and Medical Library at the Medical Center, 103d St., New York City. The librarian there stated, "They are something entirely unique and worth their weight in gold." Two of these books were sent to the Dental Library of Columbia University and the remaining two to the Dr. Gaylord Dental Memorial Library of New Haven, Conn.

The prime distinction of his busy life, Dr. Watkins feels, is the honor of being the acknowledged "discoverer" of Calvin Coolidge. Dr. Watkins was the first to nominate Mr. Coolidge for President through the press, and his letter of November 8, 1919, to the *Montclair Times* was the first of its kind to be printed in an American newspaper. The letter follows:

"To the Editor of the *Times:*

"Sir:

"Through the *Montclair Times* I want to nominate the Honorable Calvin Coolidge as the Presidential Candidate for the Republican Party in 1920. Mr. Coolidge has risen step by step, holding all the offices in Massachusetts: city solicitor, mayor, member of the House of Representatives, as senator, as president of the senate, as lieutenant governor and as governor, filling all offices with honor and satisfaction. As governor, in settling the police strike, he showed courage and honesty of purpose to such an extent that he has proven himself a credit and a wonderful

Some of Dr. Watkins' relics

help to every city and town in the United States, and won the election Tuesday by an immense plurality, the greatest ever given any governor in Massachusetts. He is the kind of man we want for President, not afraid to do things.

"S. C. G. WATKINS."

Among the many letters from presidents, living and dead, which Dr. Watkins cherishes in his voluminous scrapbooks of personally autographed letters is a personal message from Mr. Coolidge thanking Dr. Watkins for his early support of Mr. Coolidge's cause.

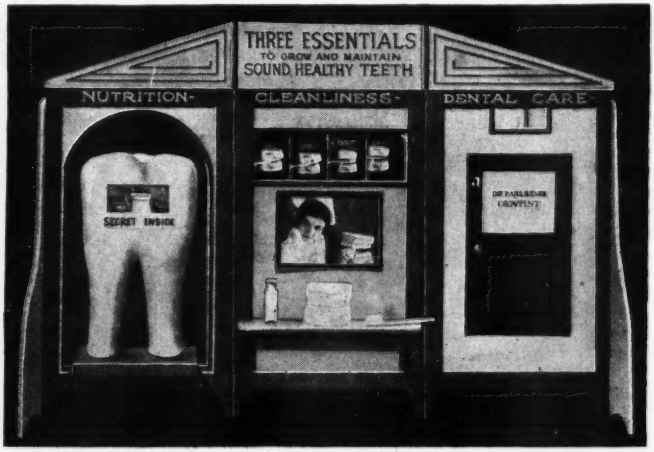
New Health Exhibit

THE health exhibit shown below was designed by Dr. Thomas B. McCrum of Kansas City, Missouri, and has created considerable interest and comment at the various dental conventions where it has been shown.

This display emphasizes the three phases or essentials in the growth and maintenance of sound, healthy teeth—nutrition, cleanliness and dental care. The window opening into the giant molar reveals samples of the foods necessary for proper nutrition, that is, milk, vegetables, etc. The center panel shows the correct methods of brushing the teeth, while the panel on the right suggests the early care of the teeth by the name on the door of the dental office, "Dr. Earl E. Care."

Dr. McCrum has for many years taken an active interest in the promotion of oral hygiene in his own city and state, and in national activities of the American Dental Association. He was one of the first, if not the first, dentist in Kansas City to promote dental hygiene in the public schools. In addition to this he has developed and produced several motion pictures which have been used throughout the country in teaching the value of oral health to children.

Anyone interested in dental films or in a reproduction of the exhibit shown on this page should get in touch with Dr. McCrum. His address is 4144 Charlotte Street, Kansas City, Missouri.



Feeling Dentistry's Pulse

By

DIAGNOSTICIAN

From the Mailbag

Dear Doctor:

I must comment unfavorably on your "Help Wanted" article in the December issue.* This article seems to be based entirely on hearsay evidence, which as you know is practically always inaccurate and unreliable.

I know Sherman L. Davis personally, have heard numerous of his lectures and talked with him privately on the subject of diet and dental caries many times. If I ever saw one, Dr. Davis is a high grade honorable gentleman, but you make him out to be a charlatan and quack. This is most unjust. You base your article on what *Literary Digest* says Dr. Davis said, but it is not a quotation from him. I am sure you should know the almost universal tendency of the lay writer or speaker to inaccurately quote a scientific or professional man.

Never have I heard Davis say that a carious cavity could be filled in, except by the usual dental procedure. He does say however that in a great many cases under proper diet and with or without his treatment the carious material in the cavity may recalcify and further caries inhibited. Howe and Shurman say the same thing and they are all correct. I have seen just this happen in numerous experimental cases here in Atlanta. Your sarcasm and wit, prompted by an insufficient

*December, 1931, ORAL HYGIENE, p. 2642.

knowledge and an evident bias, is unfair, unjust and incompatable with the cool, scientific mind.

Dr. Davis has done many years of laboratory and clinical research work on these problems and his results would be most useful both to the dental and medical world, were it not for the fact that he is not a member of either of these professions.

I can also say that I am not alone in the above expressed opinions, as I know that Davis' work has made him many friends among the Southeastern dentists, and I am expressing also sentiments of this rather large circle.

Very sincerely yours,

HARRY B. JOHNSTON†
Atlanta, Ga.

Dear Dr. Johnston:

I was interested to receive your letter of December 14 regarding the article "Help Wanted" in the December issue of ORAL HYGIENE.

I, too, know Dr. Davis pretty well and have no wish to make him appear as a vicious charlatan. However, in some of his remarks he does not exactly qualify as the possessor of the cool, scientific mind that you mention. The fact that he has not presented his evidence in the objective, scientific manner to the satisfaction of the Council on Dental Therapeutics is enough for me to place him in the doubtful list of scientists.

But withal, controversy stirs the minds and sometimes the emotions of men. It is then, a thing to be devoutly wished for on occasion. Whenever someone presents evidence in the best scientific manner that Dr. Davis can "recalcify the carious material in the cavity" that day I shall doff my hat and shout his praises from the house tops.

Believe me, I enjoyed your letter and thank you.

Very truly yours,

DIAGNOSTICIAN

---

†Dr. Johnston is president-elect of the Georgia State Dental Society.

The New Dental Digest at Chicago

THE new *Dental Digest* made its first appearance at the Chicago Dental Society meeting last month; the meeting closed as final forms of this ORAL HYGIENE went to press.

The new journal was received with a degree of enthusiasm far beyond the fondest expectation of its sponsors.

Dental Digest staff-members went to the meeting hoping that the profession would like the new magazine—but not at all sure about it. Everyone on the staff had worked hard to create a publication that would justify professional approval.

But they had all been so close to it for so long as to lose perspective.

Their own doubt was swept away during the first hour of the Monday session; the profession at Chicago not only approved the new journal but approved it so heartily as actually to thrill its editors and publishers.

If they did not have it before, staff-members were given a deep sense of responsibility: a realization that it will be necessary not only to maintain the new standard set by the January *Digest* but to continue to improve upon it.

LAFFODONTIA

If you have a story that appeals to you as funny, send it in to the editor. He MAY *print it—but he won't send it back.*

Did you hear the story about the Scotchman who refused to buy the automobile until the salesman agreed to throw in the clutch?

Dr. Carl S. Patton met a farmer who said he always drank 15 to 20 cups of strong coffee a day. "But," inquired Dr. Patton, "doesn't it keep you awake?" To which the farmer gave reply, "It helps."

"I want a ticket for Virginia," Mose said to the ticket agent.

"What part of Virginia?"

"All of her," Mose came back. "Dat's her watching my suitcase."

He was standing on the corner, paying absolutely no attention to anyone. He shook his head and mumbled to himself: "No, no, no—no, no, no!" He paid no attention to the crowd that gathered but just kept saying: "No, no, no!"

An officer shook him by the arm and said: "What's the matter, my friend?"

"Nothing at all," came the reply, "I'm just a 'yes man' taking a day off!"

"Why did you give up the stage after appearing in that old Roman play?"

"The audience wanted me to be thrown to them instead of to the lions."

"Paul, this suit is very shabby. May I give it away?"

"Heavens, no. That is the suit I go in to protest against my income tax."

"Are you positive that the defendant was drunk?"

"No doubt," growled Officer Raynor.

"Why are you so certain?"

"Well, anyhow," replied Raynor, "I saw him put a penny in the patrol box on Fourth Street, then look up at the clock on the Presbyterian church and shout: 'Gawd! I've lost fourteen pounds weight!'"

An old codger was crossing a busy corner when a huge police dog dashed into him and bowled him over. The next instant an Austin skidded around a corner, bumped him, inflicting more severe bruises.

Bystanders assisted him to his feet, and someone asked him if the dog had hurt him.

"Not exactly," he replied, "it was the tin can tied to his tail that did the most damage."

Teacher: "If a number of cattle is called a herd, and a number of sheep is a flock, what would a number of camels be called?"

Little Johnny: "A carton."

Rastus: "Sambo, if de good Lawd had to take away either the sunshine or the moonlight, which would you prefer?"

Sambo: "Why de sunlight, of co'se. De sun shines in the daytime when it's light anyway, but the ol' moon she light up things when it's dark."

He: "I dreamed of you last night."

She (coldly): "Really!"

He: "Yes; then I woke up, shut the window, and put an extra blanket on the bed."